CIRCASSIA GROUP PLC
PRELIMINARY RESULTS FOR THE YEAR ENDED 31 DECEMBER 2019

Oxford, UK – 16 June 2020: Circassia Group plc ("Circassia" or "the Company") (LSE: CIR) today announces its preliminary results for the year ended 31 December 2019 and a post-period update.

Financial progress

Key performance indicators £m	2019 underlying continuing operations	2018 underlying continuing operations	2019 total	2018 total
Revenue	62.4	48.3	62.4	48.3
R&D costs[1]	(6.4)	(8.6)	(96.8)	(87.2)
G&A costs[1]	(11.9)	(11.1)	(13.0)	(11.5)
S&M costs[1]	(55.7)	(52.5)	(55.7)	(55.4)
EBITDA	(27.8)	(32.8)	(119.3)	(114.7)
Loss for the year	(39.0)	(25.9)	(48.3)	(117.1)
Net cash outflow	(13.7)	(18.8)	(13.7)	(18.8)
Cash[2] **at year end**	27.0	40.7	27.0	40.7

NIOX®

- Continued strong revenue growth with sales increasing 27% to £34.6 million (2018 CER[3]: £27.3 million)
- Strong growth in all direct markets

Post-period update

- COVID-19 impact has been significant, but varied by market
- Q1 2020 sales excluding China decreased 4% (CER), reflecting 3 weeks of lockdown in most direct markets in March
- China sales fell 66% in Q1 (CER) following two months of lockdown
- April and May revenues below 50% of prior year as a result of COVID-19 impact
- Some early signs of recovery in several markets although revenues remain well below 2019 level

COPD portfolio

Tudorza®

- Net in-market sales totalled £27.0 million vs 2018 collaboration revenues of £21.5 million (CER)
- H2 2019 revenue growth driven by price increase and rebate reductions
- Modest fall in prescriptions with decline greater during H2 2019

Duaklir®

- NDA approved H1 2019 with launch Q4 2019
- Challenging launch in market dominated by 'big pharma' competitors

Post-period portfolio update

- Strategic review determined COPD business unsustainable
- Transformational agreement with AstraZeneca to return products and set off related debt of $150.9 million
- Revenue levels largely unaffected by COVID-19

LungFit™ PH* (formerly AirNOvent)

- US and China commercial rights acquired to late-stage nitric oxide product from BeyondAir (formerly AIT)
- Notice received alleging termination and breach of agreement refuted in strongest terms

Post-period update

- BeyondAir anticipates US filing Q2 2020
- Legal team continues to defend rights under agreement

Ian Johnson, Circassia's Executive Chairman, said: *"Good progress was made during 2019, increasing sales, controlling underlying costs and reducing net cash outflow. Notably, NIOX® maintained its impressive growth with sales increasing in all its direct markets and across its partner territories. Whilst revenues have*

been impacted during the recent pandemic, the potential for the underlying NIOX® business remains highly encouraging."

"While NIOX® continued to advance, progress in the Company's COPD (chronic obstructive pulmonary disease) portfolio was more nuanced. Tudorza® revenues increased significantly during 2019, reflecting the move to report full in-market sales as well as increased pricing and lower rebates in the second half. However, prescription numbers declined and Duaklir®'s launch proved challenging in a field dominated by major pharmaceutical groups. Consequently, the COPD business continued to make major losses, making the significant debt owed to AstraZeneca in relation to these two products unsustainable. As a result, on 27 May 2020 the Company transferred the products back to AstraZeneca and set off the debt in its entirety."

"With this transformational transaction now complete, Circassia is well placed to become a self-sustaining, cash generative business once the effects of the COVID-19 pandemic pass over. During the ongoing pandemic, the Company's focus is firmly on maintaining its world-leading NIOX® business, serving its customers around the world as they support their patients with respiratory diseases. As restrictions lift, Circassia intends to return NIOX® to growth as quickly as possible, and with a strong underlying business and robust debt-free balance sheet the Company looks beyond the current period of disruption with great optimism."

"To ensure access to liquidity during this period of disruption, the Company recently concluded an equity financing facility with two of its principal shareholders to allow it to access up to £5 million over the period to 30 November 2020 at a price of 24.6p per share. This provides the Company with access to additional funding should this be required in the coming months."

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About Circassia

Circassia is a leading medical device business focused on respiratory disease. The Company sells its market-leading NIOX® asthma management products directly to specialists in the United States, United Kingdom, China, Germany and Italy, and in a wide range of other countries through its network of distribution partners. Circassia also has the US and Chinese commercial rights to the late-stage ventilator-compatible nitric oxide product LungFit™ PH. For more information please visit www.circassia.com.

Forward-looking statements

This press release contains certain projections and other forward-looking statements with respect to the financial condition, results of operations, businesses and prospects of Circassia. The use of terms such as "may", "will", "should", "expect", "anticipate", "project", "estimate", "intend", "continue", "target" or "believe" and similar expressions (or the negatives thereof) are generally intended to identify forward-looking statements. These statements are based on current expectations and involve risk and uncertainty because they relate to events and depend upon circumstances that may or may not occur in the future. There are a number of factors that could cause actual results or developments to differ materially from those expressed or implied by these forward-looking statements. Any of the assumptions underlying these forward-looking statements could prove inaccurate or incorrect and therefore any results contemplated in the forward-looking statements may not actually be achieved. Nothing contained in this press release should be construed as a profit forecast or profit estimate. Investors or other recipients are cautioned not to place undue reliance on any forward-looking statements contained herein. Circassia undertakes no obligation to update or revise (publicly or

otherwise) any forward-looking statement, whether as a result of new information, future events or other circumstances.

[1]Excludes depreciation and amortisation
[2]Includes cash, cash equivalents
[3]Constant exchange rates (CER) for 2019 represent reported numbers re-stated using 2018 average exchange rates; management believes CER comparisons better represent underlying performance due to currency fluctuations against sterling
*LungFit™ PH is not an approved name and may not be the final commercial name

OPERATING REVIEW

Strategic overview

During 2019, the Company increased revenues and reduced its net cash outflow compared with the prior year. Notably, the NIOX® business continued its upward trajectory with growth in all of its direct markets, while a number of new distribution partners, approvals and launches extended its global reach.

The Company also achieved growth in its COPD business. This reflects the move to record Tudorza®'s full in-market sales versus collaboration revenues the prior year, as well as a price increase and rebate reductions in the second half. However, this progress was offset by a challenging launch for Duaklir®, ongoing operating losses across the COPD portfolio and significant debt owed to AstraZeneca relating to the products. Consequently, the Board conducted a strategic review of the COPD business, which concluded it was unsustainable under all reasonable scenarios. As a result, the Company entered discussions with AstraZeneca and reached agreement to return the products and set off the associated debt in its entirety.

This transformational transaction completed on 27 May 2020, leaving the Company in a strong position with a robust, debt-free balance sheet, market-leading global NIOX® products and a clear strategy to grow the business. With a renewed focus on NIOX®, the Company intends to expand its footprint geographically, enhance its customer offering to drive product utilisation and place greater emphasis on the use of NIOX® by clinical research organisations and in other alternative channels. By pursuing this focused strategy, the Company looks forward to transforming into a high-growth, cash-generative, profitable business.

NIOX® asthma management products

NIOX® is a simple-to-use point-of-care system used around the world to help improve asthma diagnosis and management. NIOX® directly measures the nitric oxide exhaled in patients' breath (fractional exhaled nitric oxide or FeNO), which is an important biomarker of the major underlying cause of asthma, type 2 airway inflammation. Circassia commercialises NIOX® through the sale of the core FeNO measurement device, which then generates high margin recurring revenues for sensors and consumables on a per test basis. NIOX® is sold directly by Circassia's commercial teams in the United States, China, UK and Germany. In addition, Circassia sells NIOX® in nearly 50 additional countries around the world through its international network of distribution partners.

NIOX® represents a significant commercial opportunity for Circassia, with the global respiratory diagnostics market valued at $4.4 billion in 2018 and with an estimated compound annual growth rate (CAGR) of 6.6%. NIOX® is the leader in the FeNO testing market and revenues continued to grow, achieving a CAGR of 14% between 2016 and 2019. The Company intends to consolidate this leading position through geographical expansion, improved customer and technical services ensuring customers can maximise throughput and an increased focus on uptake in clinical studies and other alternative channels.

Increasing sales

During 2019, NIOX® sales enjoyed continued strong growth. Global revenues of £34.6 million were 27% higher than 2018 at constant exchange rates (CER), reflecting increases in each of the Company's key markets. The Company's revenues in China grew 136% year on year benefitting from the very significant investment in direct resources. In the US, NIOX® sales ended the year 14% ahead of the previous year, and the UK and German markets were 23% and 5% higher respectively (CER). The Company's partner markets also performed well, with revenues increasing by 21% compared with the prior year (CER). Overall clinical sales for use by healthcare professionals were 31% higher in 2019 (CER), while less predictable research sales for use in clinical studies were down modestly (5% at CER).

The performance of the NIOX® business in 2019 indicates that the business is one which is capable of delivering very attractive growth rates and, whilst it is currently being significantly impacted by the reduction

in routine testing of asthma patients as a result of COVID-19, the Board has considerable optimism in the underlying growth opportunities over the medium term and beyond.

Post-period performance
In the first five months of 2020 NIOX® revenues were impacted in nearly all markets during the COVID-19 outbreak, although the extent varied by territory and timing of local restrictions. Global revenues declined 34% compared with the same period in 2019, largely driven by falls of 69% in China and 62% in research sales. Revenues in the US and UK slowed, decreasing 36% and 21% respectively. The impact was lesser in Germany and partner markets, where sales were only 11% and 7% lower than the same period in 2019. In April and May 2020, revenues recovered modestly in a number of countries as restrictions were gradually lifted, but remained well below the same period in 2019 at both a global and local level. While it remains highly challenging to predict revenue trajectory, early signs of recovery in certain markets offer some signs of encouragement. As a result of the coronavirus-related downturn, the Company anticipates that the NIOX® business will burn cash for a period before becoming both profitable and cash generative in the medium term.

On 2 June 2020, the Company announced that it had concluded an equity financing facility with two of its principal shareholders to allow it to access up to £5 million until 30 November 2020 at a price of 24.6p per share. This provides the Company with access to additional funding should this be required in the coming months.

Market expansion
Throughout 2019, Circassia maintained its focus on increasing market penetration in its direct sales territories. In the United States, payor coverage reached approximately 80% of insured lives, providing nearly 235 million Americans with access to NIOX®, and the Company was awarded a group purchasing agreement by leading healthcare improvement company, Premier Inc.

In China, the team maintained its focus on market access. During the year, reimbursement coverage for FeNO testing continued to grow and now covers 16 provinces. In the UK the Company continued its 'Asthma Masterclass' programme to drive wider adoption in primary care. Circassia has also rolled out a new European promotional campaign featuring representative materials, website optimisation and syndicated social media content.

In addition to the market access activities in the Company's direct sales territories, Circassia continued to expand its global reach. NIOX® received a number of new approvals, including recently in Brazil, and the Company added new distribution partners in several markets, such as Canada, Saudi Arabia and Chile. With launches in additional territories, Circassia's network of partners covers nearly 50 countries. In addition to expanding its international footprint, the Company continued its programme of support for partners' NIOX® promotion. This included the Company's annual partner meeting, which was held at the European Respiratory Society conference, and at the end of 2019 Circassia launched a new portal to provide easy access to marketing, training, medical and regulatory resources.

NIOX® innovation
In 2019, NIOX® received a number of awards in recognition of its contribution to healthcare. In the United States, the country's largest healthcare performance improvement company, Vizient Inc., presented Circassia with an Innovative Technology Supplier of the Year award for 2018, while in the UK the Association for Respiratory Technology & Physiology recognised the Company as a manufacturer of the year.

Circassia is building on its position as the market leader, and at the 2019 European Respiratory Society International Congress the Company launched the NIOX VERO® PLUS. This upgrade provides customers with major enhancements, with a significantly larger screen and intuitive new graphical interface, while retaining the core NIOX VERO® FeNO technology. Customer feedback at the launch was highly positive, and with the European CE marking completed the Company plans to roll out the upgrade in Europe initially.

United States COPD portfolio
Tudorza® (aclidinium bromide), a long-acting muscarinic antagonist (LAMA), and Duaklir® (aclidinium bromide / formoterol fumarate), a LAMA / LABA combination (long-acting muscarinic antagonist / long-acting beta agonist), are both approved in the United States for the maintenance treatment of COPD. Throughout 2019 Circassia held the US commercial rights to the products under its 2017 agreement with AstraZeneca.

Tudorza®
At the end of 2018, Circassia exercised its option for the full US rights to Tudorza® and consequently recorded the product's total in-market sales throughout 2019. During the first half of the year the Company launched a dedicated COPD sales force, and at the end of June Tudorza®'s licence transferred to Circassia providing the opportunity to introduce new distribution, pricing and patient access strategies. Additionally, in H1 2019 the Food and Drug Administration (FDA) approved the expansion of Tudorza®'s label to include COPD exacerbation reduction data and data demonstrating cardiovascular safety in patients with cardiovascular disease / risk factors.

Tudorza® sales
During 2019, Tudorza® net in-market revenues totalled £27.0 million, compared with the £21.5 million recorded in 2018 (CER) under the Company's previous product collaboration with AstraZeneca. This significant increase reflects the difference in revenue reporting (collaboration revenue versus in-market sales), as well as an increase in the wholesale acquisition cost, reduction in rebates and move away from unfavourable contracts during the second half of the year. With the introduction of these measures, H2 2019 net revenues increased by 90% compared with H1 2019. However, despite this revenue growth prescriptions declined modestly during the year, with an acceleration in the last six months.

Duaklir®
In the first half of 2019, the FDA approved Duaklir® for sale in the United States. Its label includes exacerbation reduction data and a 24-hour profile demonstrating FEV1 improvement providing the product with a number of competitive advantages.

At the end of October 2019, the Company launched Duaklir® at the American College of Chest Physicians' CHEST Annual Meeting 2019 in New Orleans. With complementary positioning alongside Tudorza®, Circassia leveraged its newly introduced COPD business model and dedicated team to commercialise Duaklir® across the country.

Since its launch, Duaklir® prescriptions have struggled to gain traction in a market dominated by major multi-national pharmaceutical companies. As a result, revenues remain below expectations, with 2019 sales following the product's launch in October totalling £0.8 million.

Post-period update
Following the launch of Duaklir® the Company conducted a wide-ranging strategic review of its US COPD business. This concluded that despite the increase in Tudorza® revenues the portfolio continued to incur significant operating losses. Given these ongoing losses the Company would likely need to raise additional funding to support the business, with no certainty on what terms this would be available, if at all. The strategic review also considered a range of alternative courses, including greatly reducing the size and scale of the COPD business, but under all reasonable scenarios it remained highly unlikely Circassia would be able to refinance the loan owed to AstraZeneca, which with accrued interest totalled approximately $150.9 million on completion date.

As a result, in April 2020 Circassia and AstraZeneca agreed to terminate the companies' 2017 development and commercialisation agreement relating to the products. Upon termination AstraZeneca acquired the US commercial rights to Tudorza® and Duaklir®, with the consideration equal to and set off against the entire loan and accrued interest owed by Circassia. The transaction completed on 27 May 2020. Under the product acquisition agreement, Circassia will continue to sell Tudorza® and Duaklir® with the support of AstraZeneca until the end of March 2021, ensuring patient supply is uninterrupted. At the end of this run-off period the products will transfer to AstraZeneca.

This agreement will transform Circassia's business. Under the transfer arrangements agreed with AstraZeneca, Circassia anticipates that the COPD business will be cash positive during the run-off period, which will significantly reduce the Company's cash burn and allow it to focus its resources on expanding its world-leading NIOX® business. The transaction accelerates the Company's transition towards becoming a cash-generative, self-sustaining business.

LungFit™ PH (previously AirNOvent)
In January 2019, Circassia acquired the US and Chinese commercial rights to AirNOvent (now LungFit™ PH) from AIT Therapeutics Inc. (now BeyondAir Inc.). LungFit™ PH is a late-stage ventilator-compatible system that uses an electric voltage to produce nitric oxide from the nitrogen and oxygen in air. Inhaled nitric

oxide is approved in the United States for use in the treatment of hypoxic respiratory failure associated with persistent pulmonary hypertension of the newborn (PPHN). PPHN is potentially fatal and its management can be complex, involving a number of treatments including the use of oxygen and inhaled nitric oxide.

Agreement status
Under the terms of the companies' agreement, Circassia issued BeyondAir $10.5 million in new ordinary shares as consideration for upfront and milestone payments. Additional milestones, which are payable in cash or shares, include a payment of $12.6 million on FDA approval in the treatment of hypoxic respiratory failure associated with PPHN, and a further $1.05 million on the product's launch in China. Royalties will also be payable on gross profits from product sales.

Under the terms of the agreement, BeyondAir is responsible for the product's development, manufacture and US regulatory filing, and it currently anticipates submitting an application for Premarket Approval (PMA) in Q2 2020 for use in the treatment of PPHN. Circassia is responsible for the product's commercialisation following approval.

At the end of 2019, BeyondAir issued a notice stating that it had terminated the companies' agreement for material breach. Circassia strongly disputes and intends to challenge BeyondAir's allegations and its purported termination. The Company has retained counsel and intends to take steps to enforce its rights under the agreement.

Corporate progress

During the latter part of 2019, and the first months of 2020, Circassia has focused on building a self-sustaining business. It has made good progress, culminating in the recent transaction with AstraZeneca to transfer the Company's loss-making COPD business and focus its resources on its market-leading NIOX® products. The Company has also significantly strengthened its Board, transferred trading in its shares to AIM in February 2019 and changed its name to better reflect its business in May 2020.

Board changes
With the completion of the Company's transition into a commercially-focused business, the Board has evolved significantly to drive the next step in Circassia's development. During 2019, the Company's Senior Vice President of R&D, Rod Hafner, stepped down as an Executive Director following 11 years in the role. At the same time, the Company appointed Jonathan Emms as Chief Operating Officer to further strengthen its commercial expertise and oversee its operational and commercial strategy. Prior to joining Circassia, Jonathan was Chief Commercial Officer for Pfizer's Internal Medicines organisation and gained significant respiratory experience at GSK where he held a number of positions. Earlier in the year, Russ Cummings retired as a Non-Executive Director after 12 years in the role.

At the end of 2019, Circassia announced the retirement of CEO and Co-Founder, Steve Harris, after 13 years leading the Company, and of Chairman Dr Francesco Granata who had previously informed the Board of his intention to retire. Concurrently, Circassia appointed a highly-experienced life science company director, Ian Johnson, as Executive Chairman. He is currently Non-Executive Chairman of Redcentric PLC and a Non-Executive Director of Ergomed PLC. He was previously Executive Chairman of Bioquell PLC and Non-Executive Chairman of Quantum Pharma PLC, Cyprotex PLC and Celsis Group Ltd, following a number of years as CEO of Biotrace International PLC.

The Company's executive team was joined by new Chief Financial Officer Michael Roller in January 2020 following the previous CFO, Julien Cotta, stepping down from the role. Michael is a highly experienced Finance Director and life science company Director and was previously Group Finance Director of Bioquell PLC and Corin Group PLC.

At the start of March 2020, the Board was further strengthened with the addition of Garry Watts as Senior Independent Director and Non-Executive Director. Garry is an experienced Chairman and Director, is currently Non-Executive Chairman of Spire Healthcare Group PLC and was Chairman of BTG PLC until its sale to Boston Scientific in 2019.

The Board wishes to thank all of the previous directors for their significant contributions to the development of the Company over many years and welcomes the new team to Circassia. The newly constituted Board brings significant commercial, corporate and financial expertise to the Company as Circassia drives towards self-sustainability, building shareholder value and a profitable cash-generative business.

Additionally, the Board wishes to thank the wider Circassia team for their hard work and considerable efforts during 2019 and in this ongoing time of significant change in the business and more broadly with the challenge of the ongoing coronavirus pandemic. Following the end of this period of disruption, the Board looks forward to greater stability when the Circassia team can continue its focus on building an exciting high-growth business.

Company name change

Following the agreement in April 2020 to transfer Tudorza® and Duaklir® to AstraZeneca, the Company sought shareholder approval to change its name to Circassia Group plc. This change reflects the transformation in the Company's business and its exclusive focus on its world-leading NIOX® products rather than pharmaceutical products. On 30 April 2020, shareholders granted permission and the name change has been formally adopted by the Company.

Summary and outlook

During 2019, Circassia continued to make progress, particularly in its core global NIOX® business where sales grew across all its key markets. While progress in the US COPD business was more nuanced, Tudorza® revenues increased following the introduction of targeted new strategies and the move away from the previous collaboration arrangement to full commercial control. However, this growth was tempered by a challenging launch for Duaklir®, ongoing losses across the COPD portfolio and significant debt relating to the products. As a result, the recent agreement to transfer the products back to AstraZeneca will immediately transform the Company and its prospects.

This transaction leaves Circassia debt-free with a robust balance sheet and provides the opportunity to focus its resources exclusively on growing its market-leading NIOX® business. With a strong commercial team and distribution partners in nearly 50 further countries, Circassia is well placed to pursue its goal of building a cash-generative, profitable business.

During the remainder of the year, the Company intends to build on this position, supporting its customers, controlling underlying costs and driving down corporate expenditure to further protect its balance sheet. While it remains challenging to predict short-term business performance during the coronavirus pandemic, early signs of recovery offer some encouragement and beyond this period of disruption the Company anticipates a return to strong revenue growth in the medium to long-term, creating value for customers, patients, employees and shareholders alike.

FINANCIAL REVIEW

On 27 May 2020, the Group handed back the rights to its COPD products to AstraZeneca. The COPD business is presented below as a continuing activity of the Group as it did not meet the criteria at the balance sheet date to be classified as a discontinued operation. In 2020, it will be presented as a discontinued operation and the Group will report as continuing activities both the results of its NIOX® business and, separately, its corporate costs.

The table below sets out the Group's results for the year ended 31 December 2019, separated into continuing and discontinued operations. Continuing operations are further divided into underlying and non-underlying operations. Continuing underlying operations include revenues from sales of Tudorza®, Duaklir® and NIOX®, as well as the costs of the underlying business.

Non-underlying operations include irregular and non-recurring expenditure, such as those relating to the reorganisation of the Board and Senior Management Team and other non-cash gains and losses relating to the deferred consideration payable to AstraZeneca. Discontinued operations include direct costs and overheads associated with the in-house respiratory pipeline which ceased in April 2018 and residual costs from the allergy programmes for which all development ceased in April 2017.

	Underlying operations		**Non-underlying operations**		**Total continuing**		**Discontinued operations[1]**			**Total**
	2019	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018
	£m	£m	**£m**	£m	**£m**	£m	**£m**	£m	**£m**	£m
Revenue	**62.4**	48.3	**-**	-	**62.4**	48.3	**-**	-	**62.4**	**48.3**
Cost of sales	**(16.2)**	(8.9)	**-**	-	**(16.2)**	(8.9)	**-**	-	**(16.2)**	**(8.9)**
Gross profit	**46.2**	39.4	**-**	-	**46.2**	39.4	**-**	-	**46.2**	**39.4**
Gross margin	**74%**	82%	**-**	-	**74%**	82%	**-**	-	**74%**	**82%**
Research and development	**(19.1)**	(10.8)	**(90.4)**	-	**(109.5)**	(10.8)	**-**	(78.6)	**(109.5)**	**(89.4)**
Sales and marketing	**(57.5)**	(54.4)	**-**	(2.9)	**(57.5)**	(57.3)	**-**	-	**(57.5)**	**(57.3)**
Administrative expenditure	**(12.6)**	(11.4)	**(1.1)**	(0.3)	**(13.7)**	(11.7)	**-**	(0.1)	**(13.7)**	**(11.8)**
EBITDA	**(27.8)**	(32.8)	**(91.5)**	(3.2)	**(119.3)**	(36.0)	**-**	(78.7)	**(119.3)**	**(114.7)**
Operating loss	**(43.0)**	(37.2)	**(91.5)**	(3.2)	**(134.5)**	(40.4)	**-**	(78.7)	**(134.5)**	**(119.1)**
Other gains and (losses)	**(3.5)**	1.9	**97.5**	(5.6)	**94.0**	(3.7)	**-**	(0.1)	**94.0**	**(3.8)**
Finance costs	**(3.5)**	(0.1)	**(15.3)**	(11.9)	**(18.8)**	(12.0)	**-**	-	**(18.8)**	**(12.0)**
Finance income	**0.2**	0.3	**-**	-	**0.2**	0.3	**-**	-	**0.2**	**0.3**
Loss before tax	**(49.8)**	(35.1)	**(9.3)**	(20.7)	**(59.1)**	(55.8)	**-**	(78.8)	**(59.1)**	**(134.6)**
Taxation	**10.8**	9.2	**-**	-	**10.8**	9.2	**-**	8.3	**10.8**	**17.5**
Loss for the financial year	**(39.0)**	(25.9)	**(9.3)**	(20.7)	**(48.3)**	(46.6)	**-**	(70.5)	**(48.3)**	**(117.1)**
Cash[2]									**27.0**	40.7

[1] Disclosed as a single amount in the condensed interim consolidated statement of comprehensive income

[2] Includes cash, cash equivalents and short-term deposits.

Revenue

Circassia's revenues of £62.4 million (2018: £48.3 million) include NIOX® sales of £34.6 million (2018: £27.4 million), Tudorza® revenues of £27.0 million (2018: £20.9 million) and Duaklir® revenues of £0.8 million (2018: £nil).

NIOX® revenues include sales for use in clinical practice of £30.5 million (2018: £23.4 million), sales for use in pharmaceutical company research of £3.6 million (2018: £3.7 million) and other revenues such as freight of £0.5 million (2018: £0.3 million).

Gross profit

Gross margin decreased from 82% to 74%. This was mainly due to taking commercial control of sales of Tudorza® from 1 January 2019. During 2018, contribution of revenues from AstraZeneca had a 100% gross margin due to the agreement structure, whereas in 2019, a gross margin of 74% was achieved. Gross profit on NIOX® sales was £25.5 million (2018: £18.5 million), with a gross margin of 74% (2018: 68%). This increase is due to the impact of higher margin direct sales in China and the weakening of sterling against the dollar.

Sales and marketing

Sales and marketing costs increased to £57.5 million (2018: £57.3 million). This was mainly as a result of significant expansion of commercial operations in China and higher marketing expenditure following the acquisition of the Tudorza® licence on 1 January 2019, and the launch of Duaklir® in October 2019. This is offset by the previous year's restructuring of the US field force into dedicated NIOX® and COPD teams. Sales and marketing costs of £2.9 million included in non-underlying continuing operations in 2018 represents the reorganisation cost of the US field force.

R&D activities

Research and development activities include the costs associated with regulatory, quality and medical affairs support for marketed products, device development, and depreciation and amortisation. Research and development costs from underlying operations increased to £19.1 million (2018: £10.8 million) due to amortisation charged on COPD intangible assets, offset by significantly lower headcount.

Research and development costs of £90.4 million included in non-underlying continuing operations relates to an impairment charge for the Tudorza®, Duaklir® and LungFit® licences.

Discontinued operations in 2018 included costs relating to the in-house respiratory pipeline of £78.6 million, most of which related to an impairment charge of the associated intangible assets. The impairment costs had no impact on cash.

Administrative expenditure

Underlying administrative expenditure, which includes overheads relating to corporate functions, centrally managed support functions and corporate costs, increased to £12.6 million (2018: £11.4 million). This was mainly due to the higher senior management headcount for part of the year, and higher one-off legal and professional fees.

Administrative expenses of £1.1 million included in non-underlying continuing operations represents the reorganisation cost of the Board and other members of senior management in 2019, and in 2018, the costs associated with the transfer of the Company's shares to AIM.

Other gains and (losses)

Other gains increased to £94.0 million (2018: £3.8 million loss). This was mainly due to the change in fair value of contingent royalty consideration payable to AstraZeneca for future sales of Duaklir® and Tudorza®, and to Beyond Air for future sales of LungFit™PH.

Net finance costs

Net finance costs were £18.6 million (2018: £11.7 million) for the year. This mainly relates to a non-cash charge to the income statement for the period, reflecting the difference in the discounted and actual deferred consideration payable to AstraZeneca recorded on the balance sheet. The discounted amount reflects the time value of money. Also included is £2.6 million (2018: £ nil) of interest charged on the loan from AstraZeneca.

Taxation

Taxation for the year was a credit of £10.8 million (2018: £17.5 million). Included in underlying continuing operations is an R&D tax credit of £0.1 million (2018: £1.0 million) which is lower than the previous year because of a decrease in qualifying R&D expenditure. Also included is a deferred tax credit of £10.7 million (2018: £8.2 million) which has arisen on an increase in recognised carried-forward tax losses in the Group.

The taxation credit relating to discontinued operations in the previous financial year of £8.3 million was mainly due to a reduction in the deferred tax liability following the impairment of intangible assets in the respiratory pipeline.

Loss after tax and loss per share

Basic loss per share for the period was 13p (2018: 34p loss) reflecting a loss of £48.3 million (2018: £117.1 million), with the decrease mainly due to a higher impairment of intangible assets in the previous financial year. Loss per share for continuing operations stayed constant at 13p (2018: 14p loss) reflecting a loss for the financial period of £39.0 million (2018: £25.9 million loss).

Statement of financial position

The Group's net assets at 31 December 2019 were £84.8 million (2018: £125.9 million). The decrease was mainly due to impairment of the COPD intangible assets and associated goodwill, combined with a lower cash balance and higher trade and other payables.

Current liabilities at the end of the period were £41.3 million (31 December 2018: £124.4 million). The decrease was mainly due to settlement of deferred non-contingent consideration to AstraZeneca. This was offset by the issue of a five year loan, which is classified as a non-current liability. On 27 May 2020, the Tudorza® and Duaklir® licences were handed back to AstraZeneca and the loan was set off in its entirety.

Total tax assets at 31 December 2019 were £0.2 million (31 December 2018: £4.0 million), representing the R&D tax credit due from HM Revenue and Customs. An R&D tax credit of £3.9 million was received in October 2019.

Cash flow

The Group's cash position, including cash equivalents, decreased from £40.7 million at 31 December 2018 to £27.0 million at 31 December 2019.

Cash used in operations decreased to £28.9 million (2018: £51.3 million), reflecting higher revenues and a net decrease in the overall cost base of the business.

Other significant cashflows included purchases of intangible assets of £10.0 million (2018: £0.3 million), receipt of an R&D tax credit of £3.9 million (2018: £10.9 million) and proceeds from the issue of share capital of £8.0 million (2018: £20.4 million).

Outlook

In the coming year, the Group will be simplified in order to achieve its objective of becoming a profitable and cash generative business. The NIOX® business will form the Group's continuing activities and has good growth potential in the medium term, although 2020 results will be affected by the impact of the COVID-19 pandemic. The Group plans to remain focused on cost control and anticipates a significant reduction in the core cost base during the coming year.

Michael Roller
Chief Financial Officer

16 June 2020

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME
FOR THE YEAR ENDED 31 DECEMBER 2019

	Notes	2019 Underlying operations £m	2019 Non-underlying items £m	2019 Total £m	2018 Underlying operations £m	2018 Non-underlying items £m	2018 Total £m
Continuing operations							
Revenue from contracts with customers	4	**62.4**	**-**	**62.4**	48.3	-	48.3
Cost of sales		**(16.2)**	**-**	**(16.2)**	(8.9)	-	(8.9)
Gross profit		**46.2**	**-**	**46.2**	39.4	-	39.4
Research and development costs	6	**(19.1)**	**(90.4)**	**(109.5)**	(10.8)	-	(10.8)
Sales and marketing		**(57.5)**	**-**	**(57.5)**	(54.4)	(2.9)	(57.3)
Administrative expenses		**(12.6)**	**(1.1)**	**(13.7)**	(11.4)	(0.3)	(11.7)
Operating loss		**(43.0)**	**(91.5)**	**(134.5)**	(37.2)	(3.2)	(40.4)
Other (losses) and gains - net	7	**(3.5)**	**97.5**	**94.0**	1.9	(5.6)	(3.7)
Finance costs	8	**(3.5)**	**(15.3)**	**(18.8)**	(0.1)	(11.9)	(12.0)
Finance income	8	**0.2**	**-**	**0.2**	0.3	-	0.3
Loss before tax		**(49.8)**	**(9.3)**	**(59.1)**	(35.1)	(20.7)	(55.8)
Taxation	12	**10.8**	**-**	**10.8**	9.2	-	9.2
Loss from continuing operations		**(39.0)**	**(9.3)**	**(48.3)**	(25.9)	(20.7)	(46.6)
Discontinued operations							
Loss from discontinued operations (attributable to owners of Circassia Group plc)	10	**-**	**-**	**-**	-	(70.5)	(70.5)
Loss for the year		**(39.0)**	**(9.3)**	**(48.3)**	(25.9)	(91.2)	(117.1)
Other comprehensive expense							
Items that may be subsequently reclassified to profit or loss							
Exchange differences on translation of foreign operations	31	**(1.6)**	**-**	**(1.6)**	(4.8)	-	(4.8)
Other comprehensive expense for the year, net of tax		**(1.6)**	**-**	**(1.6)**	(4.8)	-	(4.8)
Total comprehensive expense for the year		**(40.6)**	**(9.3)**	**(49.9)**	(30.7)	(91.2)	(121.9)

Loss per share attributable to owners of the parent during the year (expressed in £ per share)

Basic and diluted loss per share		**2019 £**	2018 £
Loss per share from continuing operations	13	**(0.13)**	(0.14)
Total loss per share	13	**(0.13)**	(0.34)

The Company has elected to take the exemption under section 408 of the Companies Act 2006 not to present the Parent Company profit and loss account.

The notes below are an integral part of these financial statements.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION
AS AT 31 DECEMBER 2019

	Notes	2019 £m	2018 £m
Assets			
Non-current assets			
Property, plant and equipment	14	**0.5**	0.5
Right-of-use assets	15	**1.9**	-
Goodwill	16	**4.8**	9.3
Intangible assets	17	**163.0**	221.4
Deferred tax assets	26	**28.3**	19.1
Investment in joint venture	19	**-**	0.1
Non-current tax assets	12	**-**	3.0
		198.5	253.4
Current assets			
Inventories	20	**6.5**	4.2
Trade and other receivables	21	**14.6**	8.1
Current tax assets	12	**0.2**	1.0
Cash and cash equivalents	22	**27.0**	40.7
		48.3	54.0
Total assets		**246.8**	307.4
Equity			
Share capital	28	**0.3**	0.3
Share premium	29	**630.4**	622.5
Other reserves	30	**14.7**	15.1
Accumulated losses	31	**(560.6)**	(512.0)
Total equity		**84.8**	125.9
Liabilities			
Non-current liabilities			
Borrowings	25	**109.9**	-
Lease liabilities	15	**1.5**	-
Deferred tax liabilities	26	**9.3**	10.9
Contingent consideration	24	**-**	46.2
		120.7	57.1
Current liabilities			
Trade and other payables	23	**39.6**	28.7
Lease liabilities	15	**0.6**	-
Non-contingent consideration	24	**-**	80.3
Contingent consideration	24	**1.1**	15.4
		41.3	124.4
Total liabilities		**162.0**	181.5
Total equity and liabilities		**246.8**	307.4

The notes below are an integral part of these financial statements.

The financial statements were authorised for issue by the Board of Directors on 16 June 2020 and were signed on its behalf by

Ian Johnson
Executive Chairman
Circassia Group plc

Michael Roller
Chief Financial Officer
Circassia Group plc

Registered number: 05822706

PARENT COMPANY STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2019

	Notes	2019 £m	2018 £m
Assets			
Non-current assets			
Investments in subsidiaries	18	**56.5**	67.6
		56.5	67.6
Current assets			
Trade and other receivables	21	**35.1**	282.6
Cash and cash equivalents	22	**0.1**	0.1
		35.2	282.7
Total assets		**91.7**	350.3
Equity attributable to the owners of the Company			
Share capital	28	**0.3**	0.3
Share premium	29	**630.4**	622.5
Accumulated losses	30	**(558.7)**	(289.9)
Other reserves	31	**11.8**	11.3
Total equity		**83.8**	344.2
Liabilities			
Current liabilities			
Trade and other payables	23	**7.9**	6.1
		7.9	6.1
Total equity and liabilities		**91.7**	350.3

The loss for the Parent Company for the year was £268.8 million (2018: £291.8 million).

The notes below are an integral part of these financial statements.

The financial statements were authorised for issue by the Board of Directors on 16 June 2020 and were signed on its behalf by

Ian Johnson
Executive Chairman
Circassia Group plc

Michael Roller
Chief Financial Officer
Circassia Group plc

Registered number: 05822706

CONSOLIDATED AND PARENT COMPANY STATEMENTS OF CASH FLOWS FOR THE YEAR ENDED 31 DECEMBER 2019

		Group		Company	
		2019	2018	**2019**	2018
	Notes	**£m**	£m	**£m**	£m
Cash flows from operating activities					
Cash (used in)/generated from operations	32	**(28.9)**	(51.3)	**(6.7)**	11.7
Interest paid	8	**(0.1)**	(0.2)	**-**	-
Tax credit received	12	**3.9**	10.9	**-**	-
Net cash (used in)/generated from operating activities		**(25.1)**	(40.6)	**(6.7)**	11.7
Cash flows from investing activities					
Payments for property, plant and equipment	14	**(0.3)**	(0.1)	**-**	-
Payments for intangible assets	17	**(10.0)**	(0.3)	-	-
Proceeds from sale of property, plant and equipment	14	**-**	0.5	-	-
Interest received	8	**0.3**	0.2	**-**	-
Dividends from joint venture	19	**0.1**	0.3	**-**	-
Grant of loans to subsidiary undertakings	21	**-**	-	**(1.2)**	(45.5)
Decrease in short-term bank deposits	22	**-**	15.0	**-**	15.0
Net cash (used in)/ generated from investing activities		**(9.9)**	15.6	**(1.2)**	(30.5)
Cash flows from financing activities					
Proceeds from issue of shares	28	**8.0**	20.4	**8.0**	20.4
Share issue transaction costs	28	**(0.1)**	(0.1)	**(0.1)**	(0.1)
Proceeds from borrowings	25	**14.9**	-	**-**	-
Acquisition of interest in a subsidiary	18	**-**	-	**-**	(1.7)
Principal elements of lease payments	15	**(0.9)**	-	**-**	-
Net cash generated from financing activities		**21.9**	20.3	**7.9**	18.6
Net decrease in cash and cash equivalents		**(13.1)**	(4.7)	**-**	(0.2)
Cash and cash equivalents at 1 January	22	**40.7**	44.5	**0.1**	0.3
Effects of exchange rate changes on cash and cash equivalents		**(0.6)**	0.9	**-**	-
Cash and cash equivalents at 31 December	22	**27.0**	40.7	**0.1**	0.1

The notes below are an integral part of these financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
FOR THE YEAR ENDED 31 DECEMBER 2019

	Notes	Share capital £m	Share premium £m	Other reserves[1] £m	Accumulated losses £m	Total equity £m
At 1 January 2018		0.3	602.2	17.2	(394.9)	224.8
Loss for the year	30	-	-	-	(117.1)	(117.1)
Currency translation differences	31	-	-	(4.8)	-	(4.8)
Total comprehensive expense		-	-	(4.8)	(117.1)	(121.9)
Transactions with owners:						
Issue of ordinary shares	28,29	-	20.3	-	-	20.3
Employee share option scheme	27	-	-	2.7	-	2.7
At 31 December 2018		**0.3**	**622.5**	**15.1**	**(512.0)**	**125.9**
Change in accounting policy	38	-	-	-	(0.3)	(0.3)
Restated at 1 January 2019		**0.3**	**622.5**	**15.1**	**(512.3)**	**125.6**
Loss for the year	30	-	-	-	(48.3)	(48.3)
Currency translation differences	31	-	-	(1.6)	-	(1.6)
Total comprehensive expense		-	-	(1.6)	(48.3)	(49.9)
Issue of ordinary shares	28,29	-	7.9	-	-	7.9
Acquisition of treasury shares	31	-	-	(0.2)	-	(0.2)
Employee share option scheme	27	-	-	1.4	-	1.4
At 31 December 2019		**0.3**	**630.4**	**14.7**	**(560.6)**	**84.8**

[1] Other reserves include share option reserve, translation reserve, treasury shares reserve, and transactions with NCI reserve.

The notes below are an integral part of these financial statements.

PARENT COMPANY STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2019

	Notes	Share capital £m	Share premium £m	Other reserves[1] £m	Retained earnings / (Accumulated losses) £m	Total equity £m
At 1 January 2018		0.3	602.2	8.6	1.9	613.0
Loss and total comprehensive expense	30	-	-	-	(291.8)	(291.8)
Transactions with owners: Issue of ordinary shares	28,29	-	20.3	-	-	20.3
Employee share option scheme	27	-	-	2.7	-	2.7
At 31 December 2018		**0.3**	**622.5**	**11.3**	**(289.9)**	**344.2**
At 1 January 2019		0.3	622.5	11.3	(289.9)	344.2
Loss and total comprehensive income	28	-	-	-	(268.8)	(268.8)
Transactions with owners: Issue of ordinary shares	28,29	-	7.9	-	-	7.9
Acquisition of own shares	31	-	-	(0.9)	-	(0.9)
Employee share option scheme	27	-	-	1.4	-	1.4
At 31 December 2019		**0.3**	**630.4**	**11.8**	**(558.7)**	**83.8**

[1] Other reserves include share option reserve and own shares reserve.

The notes below are an integral part of these financial statements.

Notes to the financial statements

1. Accounting policies and significant judgements

General information

The Group is a specialty pharmaceutical group focused on the development and commercialisation of respiratory products.

Circassia Group plc is a public company limited by shares which is listed on the Alternative Investment Market (AIM) and incorporated and domiciled in the United Kingdom. The Company is resident in England and the registered office is The Magdalen Centre, Robert Robinson Avenue, Oxford Science Park, Oxford, Oxfordshire, England, OX4 4GA.

The principal accounting policies adopted in the preparation of this financial information are set out below. These policies have been consistently applied to all the financial years presented, unless otherwise stated.

The directors do not recommend the payment of a dividend for the year ended 31 December 2019 (2018: £nil).

Basis of preparation

With effect from 1 May 2020, the name of the Company was changed from Circassia Pharmaceuticals plc to Circassia Group plc. The consolidated financial statements of the Circassia Group plc Group have been prepared in accordance with International Financial Reporting Standards (IFRS) and interpretations issued by the IFRS Interpretations Committee (IFRS IC) applicable to companies reporting under IFRS. The financial statements comply with IFRS as issued by the International Accounting Standards Board (IASB). The financial statements have been prepared using the historical cost convention modified by the revaluation of certain items, as stated in the accounting policies, and on a going concern basis.

The results shown for the years ended 31 December 2019 and 2018 are audited. Statutory accounts of the Company in respect of the financial year ended 31 December 2019 were approved by the Board of Directors on 16 June 2020 and will be delivered to the Registrar of Companies in due course. The report of the auditors on those accounts was unqualified and did not contain an emphasis of matter paragraph nor any statement under Section 498 of the Companies Act 2006.

The exemption from audit has been claimed for the individual financial statements of Circassia Pharma Limited (registered number 6410308) and Prosonix Limited (registered number 05679156) for the year ended 31 December 2019 under section 479A of Companies Act 2006. Circassia Group plc has given the required guarantee under section 479C in respect of the reporting year. Circassia Pharma Limited and Prosonix Limited results are included in these consolidated financial statements.

Going concern

In assessing the appropriateness of the going concern assumption, the Board has considered the availability of funding alongside the possible cash requirements of the Group and Company, taking into account the unprecedented circumstances caused by COVID-19.

The Board has prepared cash flow forecasts for a period of 18 months from the date of approval of these financial statements. This base case scenario includes the benefits of actions already taken by management to mitigate the trading downsides brought about by COVID-19, for example, restrictions on travel, limiting new hires and reducing discretionary spend as well as utilising the equity facility agreed with significant shareholders. This base case assumes that sales of NIOX® will gradually build back towards pre-COVID-19 levels of trade (94% of the value of budgeted sales) by December 2020. Under this base case scenario, the Group is expected to continue to have sufficient resources beyond 12 months from the approval of the financial statements.

The most extreme downside scenario modelled the impact of no recovery from current levels of NIOX® sales up until December 2020, rising to around 76% of pre-COVID-19 sales in December 2021 and remaining at this level for the foreseeable future. In addition, this assumes a gradual reduction of current Tudorza® revenue down to a reduction to 80% of current levels by the end of 2020, when it is expected that the run off period for this activity will cease. These reductions in revenue would be offset by significant mitigating cost reductions and cash protection actions, within the control of the Board, commencing in September 2020 (for example significant salary cuts for Board members, non-payment of discretionary bonuses and the reduction in size of certain central functions by the end of 2020). In this scenario the Group remains cash positive beyond 12 months from the approval of the financial statements.

After due consideration, the directors have concluded that there is a reasonable expectation that the Group has adequate resources to continue in operational existence for at least 12 months from the date of this report.

New and amended standards adopted by the Group

The Group has applied the following standards and amendments for the first time for their annual reporting period commencing 1 January 2019:

- IFRS 16 – Leases

The Group elected to adopt the new rules retrospectively from 1 January 2019 but has not restated comparatives for the 2018 reporting period, as permitted under the specific transition provisions in the standard. The reclassifications

and the adjustments arising from the new leasing rules are therefore recognised in the opening balance sheet on 1 January 2019. This is disclosed in note 38.

New standards and interpretations not yet adopted

Certain new accounting standards and interpretations have been published that are not mandatory for 31 December 2019 reporting periods and have not been early adopted by the Group. These standards are not expected to have a material impact on the entity in the current or future reporting periods and on foreseeable future transactions.

Critical accounting estimates, judgements
The preparation of financial statements requires the use of accounting estimates which, by definition, will seldom equal the actual results. Management also needs to exercise judgement in applying the group's accounting policies.

This note provides an overview of the areas that involved a higher degree of judgement or complexity, and of items which are more likely to be materially adjusted due to estimates and assumptions turning out to be wrong. Detailed information about each of these estimates and judgements is included in other notes together with information about the basis of calculation for each affected line item in the financial statements.

The areas involving significant estimates or judgements are:

Rebate accruals (estimate)
When invoicing Tudorza® sales, Circassia must estimate the rebates and chargebacks that are expected to be paid. These rebates typically arise from sales contracts with third-party managed care organisations, hospitals, long-term care facilities, group purchasing organisations and various federal or state programmes (Medicaid contracts, supplemental rebates, etc).

Accrual assumptions are calculated on a sales channel basis, taking into account specific contract provisions coupled with expected performance, and are then aggregated into a weighted average rebate accrual rate. Accrual rates are reviewed and adjusted on an as needed basis. There may be further adjustments when actual rebates are invoiced based on utilisation information submitted to us (in the case of contractual rebates) and claims/invoices are received (in the case of regulatory rebates and chargebacks).

As at 31 December 2019, the rebates and chargebacks accrual was £12.9 million (2018: £nil). If rebate claims were to differ by 10% from management's estimates, the rebate and chargebacks accrual would be an estimated £4.7 million (2018: £nil) higher or lower.

Recognition of deferred tax asset for carried-forward tax losses (estimate)
The deferred tax assets include an amount of £18.9 million (2018: £8.2 million) which relates to carried-forward tax losses of Circassia AB (previously known as Aerocrine AB). These losses were generated before the company was acquired by Circassia Group plc. The Group has concluded that the deferred assets will be recoverable using the estimated future taxable income based on the approved business plans and budgets for the subsidiary. The subsidiary has generated taxable income from the year ended 2017 and is expected to continue generating taxable income from 2020 onwards. The losses can be carried forward indefinitely and have no expiry date. The judgement is how profitable the entity will be in future and therefore how much of the asset can be recognised. If the future profits of Circassia AB were to differ by 10% from management's estimates, the deferred tax asset would be an estimated £1.9 million (2018: £0.9 million) higher or lower.

Valuation of contingent royalty consideration payable on Duaklir® *sales (estimate)*
As part of the collaboration agreement entered into in April 2017 between Circassia and AstraZeneca, Circassia is liable to pay royalties to AstraZeneca on future sales of Duaklir® in the United States. There is some uncertainty over the final amount of future sales and thus royalties due and therefore actual outcomes could differ significantly from the estimates made. Under IFRS 3, these royalties were initially classified as additional consideration and recognised as an IPR&D asset with a corresponding contingent liability. The value of the IPR&D asset and corresponding liability was calculated by management using a tax-effected NPV of the future royalty cash outflows at the date of the transaction.

During 2019, the sales performance of Duaklir® was well below internal forecasts and as such management concluded that future sales of Duaklir® were expected to remain low in the short-term and therefore as at 31 December 2019, the royalty liability has been remeasured to £nil. This sales underperformance led to the decision to hand the licences back to AstraZeneca, with the agreement completed and the licences handed back on 27 May 2020.

The assessment of the fair value of the contingent Duaklir® royalty consideration required the selection of an appropriate valuation model at the date of acquisition, consideration as to the inputs necessary for the valuation model chosen and the estimation of the future cash flows of the product discounted at the risk adjusted rate. Key assessments and judgements included in the calculation of deferred royalty consideration are as follows:

Valuation model	Discounted cash flow
Anticipated launch date	Reviewed and amended to take into account development, regulatory and marketing risks
Sales value, volume and growth rates	Estimates of sales value, volume and growth rates are internal forecasts based on both internal and external market information and market research commissioned by the Company
Period of specified projected cash flows	16 years
Discount rate	2019: 12.2% 2018: 17.0%

Goodwill and other intangible assets (estimate)
Goodwill and other intangible assets impairment reviews are undertaken annually or more frequently if events or changes in circumstances indicate a potential impairment. Judgements and estimates are made in respect of the carrying value of the cash generating units (CGUs) containing the goodwill taking into account key assumptions (see note 16) about the product candidates. If the Group is unable to successfully commercialise its product candidates and become profitable, this could result in an impairment of the related goodwill and intellectual property rights.

Investments (estimate)
Circassia Group plc holds a number of investment balances in subsidiary companies. Investment impairment reviews are undertaken annually or more frequently if events or changes in circumstances indicate a potential impairment. Judgements and estimates are made in respect of the carrying value of the cash generating units (CGUs) containing the investment. If there is a significant impairment of a particular CGU or if the Group's market capitalisation remains below the carrying value of Circassia Group plc's aggregate investment in subsidiaries, this could result in an impairment of the investment.

Recoverable amount of intercompany receivables (judgement)
Circassia Group plc has significant intercompany receivables due from subsidiary companies. In line with IFRS 9, the carrying value of intercompany receivable balances owed to Circassia Group plc by its subsidiaries is assessed using the simplified approach to measuring expected credit losses, which uses a lifetime expected loss allowance for all trade receivables. Judgements and estimates are made in respect of the recoverable amount of each subsidiary. If the recoverable amount of a subsidiary is below the carrying value of Circassia Group plc's intercompany receivable, this could result in an impairment of the receivable.

Estimates and judgements are continually evaluated. They are based on historical experience and other factors, including expectations of future events that may have a financial impact on the entity and that are believed to be reasonable under the circumstances.

Consolidation

Subsidiaries

Subsidiaries are all entities (including structured entities) over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are de-consolidated from the date that control ceases. Inter-company transactions, balances and unrealised gains and losses on transactions between Group companies are eliminated. Accounting policies of subsidiaries are consistent with the policies adopted by the Group. Acquisition-related costs are expensed as incurred.

Joint arrangements

The Group applies IFRS 11 to all joint arrangements. Under IFRS 11 investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor. Circassia Group plc has assessed the nature of its joint arrangements and determined them to be joint ventures. Joint ventures are accounted for using the equity method.

Segmental reporting

The Group had three continuing operating segments during 2019, NIOX®, COPD (2018: US AZ collaboration) and LungFit™PH. This is consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance, has been identified as the Executive Chairman, who makes strategic decisions.

The allergy and respiratory operating segments have been classified as discontinued operations. Information about these discontinued segments is provided in note 10.

Non-underlying operations

Management primarily manages the business and measures performance based on the results of "underlying operations". Non-underlying operations are excluded from the underlying results of the Group and consist of significant irregularly occurring and exceptional items.

Discontinued operations

A discontinued operation is a component of the Group's business that represents a separate major line of business or geographical area of operations that will not be progressed in the future. Discontinued operations are presented on the income statement as a separate line and are shown net of tax. Cash flows relating to discontinued operations are disclosed in the notes.

The decision to treat the allergy business as discontinued was made on 25 April 2017 when the Group announced a decision to cease all further activities on the allergy programmes. As such, the allergy programme costs and the associated research and development tax credit for the year ended 31 December 2018 are classified as discontinued operations in the Consolidated statement of comprehensive income in accordance with IFRS 5 requirements.

The respiratory programme costs and the associated research and development tax credit for the year ended 31 December 2018 have been reclassified as discontinued operations in the Consolidated statement of comprehensive income in accordance with IFRS 5 requirements. The decision to treat the respiratory business as discontinued was made in April 2018 when the Group announced a decision to cease investment in the in-house respiratory pipeline and to seek an out-license partner.

The COPD CGU was not classified as a discontinued operation in the current financial year as at 31 December 2019 the sale of the Tudorza® and Duaklir® licences to AstraZeneca was not highly probable.

Financial instruments

The Group's financial instruments comprise cash and cash equivalents, loans, receivables and payables arising directly from operations.

Cash balances are mainly held on short and medium term deposits with quality financial institutions, in line with the Group's policy to minimise the risk of loss. The main risks associated with the Group's financial instruments relate to interest rate risk and foreign currency risk (note 2).

Trade and other receivables
Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. They are generally due for settlement within 30 days and therefore are all classified as current. Trade receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less credit loss allowance. The Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables.

Trade receivables are written off when there is no reasonable expectation of recovery.

Other receivables are recognised initially at fair value and subsequently measured at amortised cost, using the effective interest method, less provision for impairment.

Trade and other payables
Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. They are initially recognised at fair value and subsequently held at amortised cost. Accounts payable are classified as current liabilities if payment is due within one year or less. If not, they are presented as non-current liabilities.

Leases
Until 31 December 2018, leases in which a significant portion of the risks and rewards of ownership are retained by the lessor were classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) were charged to the income statement on a straight line basis over the period of the lease.

From 1 January 2019, leases are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the group.

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the fixed and variable lease payments, less any lease incentives receivable.

The lease payments are discounted using the Group's incremental borrowing rate, being the rate that the Group would have to pay to borrow the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment with similar terms, security and conditions. To determine the incremental borrowing rate, the Group where possible, uses recent third-party financing received, adjusted to reflect changes in financing conditions since third party financing was received.

Lease payments are allocated between principal and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

Right-of-use assets are measured at cost comprising the following the amount of the initial measurement of lease liability, plus any lease payments made at or before the commencement date less any lease incentives received.

Right-of-use assets are generally depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis.

Payments associated with short-term leases of equipment and vehicles and all leases of low-value assets are recognised on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less. Low-value assets comprise IT equipment and small items of office furniture.

Goodwill and Intangible assets
Intangible fixed assets, relating to goodwill, customer relationships, technology, intellectual property rights and currently marketed products acquired through licensing or assigning patents and know-how are carried at historical cost, less accumulated amortisation, where the useful economic life of the asset is finite, and the asset will probably generate economic benefits exceeding costs.

Amortisation is calculated using the straight line method to allocate the cost of intangible assets over their estimated useful lives, as follows:

Intangible asset	Estimated useful lives
Software	5 years
CMP	13 years
Customer Relationships	18 years
IPR&D	5 – 17 years
Technology	15 – 20 years

Goodwill arising on the acquisition of subsidiaries represents the excess of the consideration transferred, the amount of any non-controlling interests in the acquiree and the acquisition date fair value of any previous equity interest in the acquiree over the fair value of the identifiable net assets acquired.

For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the CGUs, or groups of CGUs, that are expected to benefit from the synergies of the combination. Each unit or group of units to which the goodwill is allocated represents the lowest level within the entity at which the goodwill is monitored for internal management purposes. Goodwill is monitored at the operating segment level.

Goodwill impairment reviews are undertaken annually or more frequently if events or changes in circumstances indicate a potential impairment. The carrying value of the CGU containing the goodwill is compared to the recoverable amount, which is the higher of value in use and the fair value less costs of disposal. Any impairment is recognised immediately as an expense and is not subsequently reversed.

Where an acquired intangible asset is not yet available for use in the manner intended by management, the asset is tested annually for impairment by allocating the assets to the CGUs to which they relate. Amortisation would commence when product candidates underpinned by the intellectual property rights become available for commercial use. Amortisation would be calculated on a straight line basis over the shorter of the remaining useful life of the intellectual property or the estimated sales life of the product candidates.

Expenditure on product development is capitalised as an intangible asset and amortised over the expected useful economic life of the product candidate concerned. Capitalisation commences from the point at which technical feasibility and commercial viability of the product candidate can be demonstrated and the Group is satisfied that it is probable that future economic benefits will result from the product candidate once completed. Capitalisation ceases when the product candidate receives regulatory approval for launch. No such costs have been capitalised to date.

Expenditure on research and development activities that do not meet the above criteria, including ongoing costs associated with acquired intellectual property rights and intellectual property rights generated internally by the Group, is charged to the income statement as incurred. Intellectual property and in-process research and development from acquisitions are recognised as intangible assets at fair value. Any residual excess of consideration over the fair value of net assets in an acquisition is recognised as goodwill in the financial statements.

Computer Software
Expenditure on software costs is capitalised as an intangible asset and amortised over the expected useful economic life of the software. Until such an asset is fully developed, the costs are capitalised and classified within intangibles assets as ‘Software in development’. These costs are not amortised until the software has been fully developed and operational, at which point the total cost of the software development is amortised over its estimated useful life.

Investments
Investments in subsidiary companies are recognised and carried at cost less any identified impairment losses at the end of each reporting period. Investments are impaired where there is objective evidence that the estimated future cash flows of the investment have been affected.

Inventories
Inventories are valued at the lower of the acquisition cost and the net realisable value. The FIFO (first in, first out) principle is used to calculate the value of inventories. Inventories mainly comprise products for sale and stocks of components for the service activities in Sweden, China and the US. The acquisition value comprises all expenses for purchases. The net realisable value is the expected sale price less expected costs for preparation and selling. Management utilise sales forecasts to calculate the level of inventory required and compare this to current levels of inventory held to assess net realisable value.

Write-downs of inventory generally occur in the ordinary course of business and are recognised in cost of sales.
Inventory purchased as sample stock is recognised as sales and marketing costs.

Impairment of non-financial assets
Assets that have an indefinite useful life, for example goodwill or intangible assets not ready for use, are not subject to amortisation and are tested annually for impairment. Assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset’s carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset’s fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units). Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at each reporting date. Charges or credits for impairment are passed through the income statement.

Property, plant and equipment
Property, plant and equipment is stated at historical cost less depreciation. Historical cost includes expenditure that is directly attributable to the acquisition of the items. Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of replaced parts is derecognised. All other repairs and maintenance are charged to the income statement during the financial period in which they are incurred.

Depreciation is calculated using the straight-line method to allocate the cost of assets over their estimated useful lives, as follows:

Property, plant and equipment	Depreciation rate
Leasehold improvements	Over the life of the unbreakable portion of the lease
Fixtures and fittings	20%
Plant and equipment	10% - 33%

Individually significant tangible assets that are intended to be held by the Group for use in the production or supply of goods and services or for administrative purposes and that are expected to provide economic benefit for more than one year are capitalised. All other assets of insignificant value are charged to the income statement in the year of acquisition.

Costs incurred relating to an asset that is not yet complete are capitalised and held as 'Assets under construction' until they are brought into use. The asset is then transferred to the appropriate asset class and depreciated in line with the policy above.

Provisions
Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. If the amounts involved are significant, provisions are determined by discounting the expected future cash flows at a pre-tax rate which reflects the current market assessment of the time value of money and, when appropriate, the risks specific to the liability.

A charge for restructuring costs is taken to the income statement when the Group has approved a detailed and formal restructuring plan, and the restructuring has either commenced or the Group has a constructive obligation, for example having made an announcement publicly to the employee or the Group as a whole.

Borrowings
Interest-bearing loans are initially measured at fair value (with direct transaction costs being amortised over the life of the loan) and are subsequently measured at amortised cost using the effective interest rate method at each reporting date. Changes in carrying value are recognised in profit or loss.

Contingent royalty consideration
In a business combination, future royalty payments owed to the seller are treated as contingent consideration. The contingent consideration is recognised as a liability, an asset or equity depending on its terms. A contingent consideration arrangement is initially measured at fair value on the acquisition date based on a tax-effected net present value basis of the future cash outflows. Contingent consideration that is classified as a liability is remeasured to fair value at each reporting date, with changes included in the income statement in the post-combination period until the uncertainty is resolved.

Cash and cash equivalents
In the consolidated statement of cash flows, cash and cash equivalents include cash in hand, deposits held on call with banks, and other short-term highly liquid investments with original maturities of three months or less from the date of original investment.

Share capital
Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

Employee benefit expense
The Group makes contributions to defined contribution personal pension schemes for its directors and employees. The pension cost charge recognised in the year represents amounts payable by the Group to the funds. The Group has no further payment obligations once the contributions have been paid. The contributions are recognised as employee benefit expense when they are due.

Share based payments
The Group operates a number of equity-settled, share based compensation plans, under which the entity receives services from employees as consideration for equity instruments (options) of the Group. The fair value of the employee services received in exchange for the grant of the options is recognised as an expense. The total amount to be expensed is determined by reference to the fair value of the options granted:

- including the effect of any market performance conditions (for example, an entity's share price);
- excluding the impact of any service and non-market performance vesting conditions (for example, profitability, sales growth targets and remaining an employee of the entity over a specified time period); and
- including the impact of any non-vesting conditions (for example, the requirement for employees to save).

Non-market performance and service conditions are included in assumptions about the number of options that are expected to vest. The total expense is recognised over the vesting period, which is the period over which all of the specified vesting conditions are to be satisfied.

The grant by the Company of options over its equity instruments to the employees of subsidiary undertakings in the Group is treated as a capital contribution. The fair value of employee services received, measured by reference to the grant date fair value, is recognised over the vesting period as an increase to investment in subsidiary undertakings, with a corresponding credit to equity in the parent entity financial statements.

The Group's employees participate in various share option schemes as disclosed in note 27. Equity settled share based payments are measured at fair value at the date of grant and expensed on a straight line basis over the vesting period of the award. At the end of each reporting period the Group revises its estimate of the number of options with non-market performance conditions that are expected to become exercisable. The financial consequences of revisions to the original estimates, if any, are recognised in the income statement, with a corresponding adjustment to equity.

The fair value of share options is measured using either the Finnerty model (an at-market put option variant of the Black-Scholes model) or the Monte Carlo Simulation. This is dependent on the conditions attached to each of the issued options. Where conditions are non-market based the Finnerty model is used. Where market based conditions are attached to options, the fair value is determined using the Monte Carlo Simulation.

Other employee benefits
The expected cost of compensated short-term absence (e.g. holidays) is recognised when employees render services that increase their entitlement. An accrual is made for holidays earned but not taken, and prepayments recognised for holidays taken in excess of days earned.

Revenue from contracts with customers
Revenue is accounted for under IFRS 15. Revenue comprises the fair value of consideration received or receivable for the sale of goods and services in the ordinary course of the Group's activities. Revenue is shown net of value added tax and trade discounts and after elimination of intra-Group sales. Revenue represents net invoice value including fixed and variable consideration. Variable consideration arises on the sale of goods as a result of discounts and allowances given and accruals for estimated future returns and rebates. Revenue is not recognised until it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur. Income is reported as follows:

Sale of NIOX®
The Group sells medical technology equipment that enables inflammation of the airways to be measured as well as consumable items and spare parts. Revenue is recognised when a contractual promise to a customer (performance obligation) has been fulfilled by transferring control of the product to the customer, substantially all of which is on confirmation of delivery to the customer.

Sale of Tudorza® and Duaklir®
The Group markets and sells Tudorza® and Duaklir® in the United States, where it is indicated for the maintenance treatment of patients with COPD. Revenue is recognised when the goods are delivered to the wholesaler and represents net invoice value less estimated rebates, returns and chargebacks, which are considered to be key estimates. Delivery occurs when the products have been shipped to the specific location, the risks of obsolescence and loss have been transferred to the wholesaler and the wholesaler has accepted the products. When invoicing Tudorza® and Duaklir® sales, customers have a right to return a product within a given period and therefore the Group recognises a refund liability for the amount of consideration received for which the entity does not expect to be entitled.

Foreign currency translation
Monetary assets and liabilities in foreign currencies are translated into Sterling at the rates of exchange ruling at the end of the financial year. Transactions in foreign currencies are translated into Sterling at the rates of exchange ruling at the date of the transaction. Foreign exchange differences are taken to the income statement in the year in which they arise and presented within 'Other gains and (losses) - net'.

Foreign exchange differences on translation of foreign operations into the Group presentational currency, are recognised as a separate element of other comprehensive income. Cumulative exchange differences are presented in a separate component of equity entitled 'Translation reserve'.

Taxation including deferred tax

The charge for income tax is based on the results for the year, adjusted for items which are non-assessable or disallowed. It is calculated using tax rates that have been enacted or substantively enacted at the end of each reporting period.

The Group is entitled to claim tax credits in the United Kingdom for certain research and development expenditure. The amount included in the financial statements at the year end represents the credit receivable by the Group for the year and adjustments to prior years.

Deferred tax is accounted for using the liability method in respect of temporary differences arising from differences between the carrying amount of assets and liabilities in the financial information and the corresponding tax bases used in the computation of taxable profit. In principle, deferred tax liabilities are recognised for all taxable temporary differences and deferred tax assets are recognised to the extent that it is probable that taxable profits will be available against which deductible temporary differences can be utilised.

Deferred tax liabilities are recognised for taxable temporary differences arising on investments in subsidiaries and joint ventures, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

Deferred tax is calculated at the average tax rates that are expected to apply to the period when the asset is realised or the liability is settled. Deferred tax is charged or credited in the statement of comprehensive income, except when it relates to items credited or charged directly to equity, in which case the deferred tax is also dealt with in equity.

2. Financial and capital risk management

Capital risk management
The Group's objectives when managing capital are to safeguard the ability to continue as a going concern and ensure that sufficient capital is in place to fund the Group's activities. The Group's principal method of adjusting the capital available has been through issuing new shares. During 2019, the Company issued 17,572,815 ordinary shares with a value of £8.0 million to BeyondAir. This share issue was non-cash consideration in respect of the acquisition of the LungFit™ PH licence. The Group's capital is comprised of share capital and share premium, which are disclosed in notes 28 and 29 respectively. The Group monitors the availability of capital through forecasting future expenditure on an ongoing basis.

Transaction and translation risk
Foreign exchange fluctuations may adversely affect the Group's results and financial condition. The Group prepares its financial statements in British pound sterling, but a significant proportion of its expenditure and subsidiary results are in various currencies including United States dollar, Swedish krona, euro and Chinese yuan. The Group does not currently hedge against translation risk.

Financial risk factors
Monitoring of financial risk is part of the Board's ongoing risk management, the effectiveness of which is reviewed annually. The Group's agreed policies are implemented by the Executive Chairman, who submits periodic reports to the Board.

Foreign exchange risk
The majority of operating costs are denominated in British pound sterling, United States dollar, Swedish krona, euro and Chinese yuan. Foreign exchange risk arises from future commercial transactions and recognised assets and liabilities.

In relation to foreign currency risk, the Group's policy is to hold the majority of its funds in United States dollars, monitor foreign currency rates and purchase foreign currency at spot rates. The change in foreign exchange rates that is assessed to be reasonably likely for each currency in 2019 is 10% (2018: 10%).

At 31 December 2019, if the euro had weakened/strengthened by 10% against sterling with all other variables held constant, the post tax loss for the year would have been £0.3 million (2018: £0.5 million) lower/higher, as a result of net foreign exchange gains/losses on translation of euro denominated payables, receivables and foreign exchange losses/gains on translation of euro denominated bank balances.

The impact on post tax loss at 31 December 2019 of a 10% weakening/strengthening of the US dollar against British pound sterling with all other variables held constant would have been a decrease/increase of £11.0 million (2018: £0.7 million), as a result of net foreign exchange gains/losses on translation of dollar denominated borrowings, payables, receivables and foreign exchange losses/gains on translation of dollar denominated bank balances.

The impact on post tax loss and equity is immaterial for the remaining currencies.

Interest rate risk

The Group's policy in relation to interest rate risk is to monitor short and medium term interest rates and to place cash on deposit for periods that optimise the amount of interest earned while maintaining access to sufficient funds to meet day to day cash requirements.

The Group's main interest expense arises from long-term borrowings with variable rates, which exposes the Group to cash flow interest rate risk. During 2019, the Group's borrowings at variable rates were denominated in United States dollar. The Group had no borrowing in 2018.

Profit or loss is sensitive to higher/lower interest expense from cash and cash equivalents as a result of changes in interest rates.

If variable interest rates had been 10 basis points higher/lower the impact on net loss and accumulated losses in 2019 would have been an increase/decrease of £0.2 million (2018: £0.0 million) due to changes in the amount of interest receivable and interest payable.

Credit risk

Credit risk arises from cash and cash equivalents, contractual cash flows of debt investments carried at amortised cost, deposits with banks and financial institutions, as well as credit exposures to customers, including outstanding receivables.

i) Risk management

The Group's policy generally is to place funds with financial institutions which have a minimum credit rating with Fitch IBCA of A- long term/F1 short-term.

During 2019 the Group placed funds on deposit with 8 banks (2018: 8 banks). The Group does not allocate a quota to individual institutions but seeks to diversify its investments, where this is consistent with achieving competitive rates of return. It is the Group's policy to place not more than £35 million (or the equivalent in other currencies) with any one counterparty.

The value of financial instruments held represents the maximum exposure that the Group has to them. There is no collateral held for this type of credit risk.

No credit limits were exceeded during any of the periods reported, and management does not expect any material losses from non-performance by these counterparties.

ii) Impairment of financial assets

The Group only has one type of financial asset that is subject to the expected credit loss model being trade receivables. While cash and cash equivalents are also subject to the impairment requirements of IFRS 9, the identified impairment loss was immaterial.

The Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables. To measure the expected credit losses, trade receivables have been grouped based on the days past due.

The expected loss rates are based on the payment profiles of sales over a period of 36 months before 31 December 2019 and the corresponding historical credit losses experienced within this period. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables.

On that basis, the loss allowance as at 31 December 2019 and 2018 was determined as follows:

Group **31 December 2019**	**Current** **£m**	**More than 30 days past due** **£m**	**More than 60 days past due** **£m**	**More than 90 days past due** **£m**	**Total** **£m**
Expected loss rate	0.5%	31.9%	20.5%	7.5%	1.2%
Gross trade receivables carrying amount	11.9	0.1	0.1	0.4	12.5
Loss allowance	**(0.1)**	**-**	**-**	**-**	**(0.1)**

31 December 2018	**Current** **£m**	**More than 30 days past due** **£m**	**More than 60 days past due** **£m**	**More than 90 days past due** **£m**	**Total** **£m**
Expected loss rate	1.5%	12.5%	10.1%	7.9%	1.6%
Gross trade receivables carrying amount	3.4	0.1	0.1	0.2	3.8
Loss allowance	**(0.1)**	**-**	**-**	**-**	**(0.1)**

Company 31 December 2019	Current £m	More than 30 days past due £m	More than 60 days past due £m	More than 90 days past due £m	Total £m
Expected loss rate	91%	0%	0%	0%	91%
Gross receivables from subsidiary undertakings carrying amount	382.9	-	-	-	382.9
Loss allowance	**(347.8)**	**-**	**-**	**-**	**(347.8)**

31 December 2018	Current £m	More than 30 days past due £m	More than 60 days past due £m	More than 90 days past due £m	Total £m
Expected loss rate	24%	0%	0%	0%	24%
Gross receivables from subsidiary undertakings carrying amount	373.1	-	-	-	373.1
Loss allowance	**(91.4)**	**-**	**-**	**-**	**(91.4)**

The closing loss allowance for trade receivables reconciles to the opening loss allowances as follows:

	Group		Company	
	2019 **£m**	2018 £m	**2019** **£m**	2018 £m
Opening loss allowance as at 1 January	**(0.1)**	-	**(91.4)**	-
Increase in loss allowances recognised in profit or loss during the year	**-**	(0.1)	**(256.4)**	(91.4)
At 31 December	**(0.1)**	(0.1)	**(347.8)**	(91.4)

Trade receivables are written off where there is no reasonable expectation of recovery. Indicators that there is no reasonable expectation of recovery include, amongst others, the failure of a debtor to engage in a repayment plan with the Group, and a failure to make contractual payments for a period of greater than 120 days past due.

Impairment losses on trade receivables are presented within operating profit. Subsequent recoveries of amounts previously written off are credited against the same line item.

Cash flow and liquidity risk

Funds are generally placed on deposit with the maturity profile of investments being structured to ensure that sufficient liquid funds are available to meet operating requirements. The directors do not consider that there is presently a material cash flow or liquidity risk.

The table below analyses the Group's financial liabilities into relevant maturity groupings based on the remaining period at the balance sheet date to the contractual maturity date.

The amounts disclosed in the table are the contracted cash flows discounted to present value where such impact is material:

At 31 December	Less than 1 year 2019 £m	Over 1 year 2019 £m	Less than 1 year 2018 £m	Over 1 year 2018 £m
Non-contingent consideration	**-**	**-**	80.3	-
Borrowings	**-**	**109.9**	-	-
Lease liabilities	**0.6**	**1.5**	-	-
Contingent consideration	**1.1**	**-**	15.4	46.2
Trade and other payables	**39.6**	**-**	28.7	-
Total	**41.3**	**111.4**	124.4	46.2

Derivative financial instruments and hedging

There were no derivatives at 31 December 2019 or 31 December 2018.

3. Operating segments

The chief operating decision-maker is the Executive Chairman, (previously the Chief Executive Officer) and is responsible for making key operating decisions in the Group. Assessment of performance and decisions regarding the allocation of resources are made by operating segment. The 2019 operating segments are identified within the Group by product portfolios:

- NIOX® relates to the portfolio of products used to improve asthma diagnosis and management by measuring fractional exhaled nitric oxide (FeNO);
- COPD (2018: US AZ collaboration) relates to the Tudorza® and Duaklir® Pressair® products marketed in the United States, where they are indicated for the maintenance treatment of patients with COPD; and
- LungFit™PH relates to the portable ventilator-compatible system, the rights to which were purchased from BeyondAir.

The revenues generated in the COPD CGU in the current financial year of £27.8m are derived through sales to one wholesaler and as such is reliant on one major customer.

The allergy and respiratory operating segments have been classified as discontinued operations. Information about these discontinued segments is provided in note 10.

There were no sales between the segments in either reporting year.

The table below presents information regarding the Group's operating segments for the years ended 31 December 2019 and 2018. Only the results for the Group's underlying continuing activities are included in order to aid comparison. Costs shared between the segments are not allocated to individual segments for decision making purposes. These are disclosed under the column headed 'Unallocated'. There was no activity in the LungFit CGU for either financial year presented below.

Segment operating loss

Year ended 31 December 2019	**NIOX®**	**COPD**	**Unallocated**	**Total**
	£m	**£m**	**£m**	**£m**
Revenue (from external customers by country, based on the destination of the customer)				
US	10.4	27.8	-	38.2
UK	2.0	-	-	2.0
EU	7.4	-	-	7.4
Asia Pacific	14.5	-	-	14.5
Rest of world	0.3	-	-	0.3
Total segment revenue	**34.6**	**27.8**	**-**	**62.4**
Cost of sales	(9.1)	(7.1)	-	(16.2)
Research and development	(1.9)	(12.2)	(5.0)	(19.1)
Sales and marketing	(24.6)	(32.9)	-	(57.5)
Administrative expenses	-	(0.1)	(12.5)	(12.6)
Operating loss from continuing operations	**(1.0)**	**(24.5)**	**(17.5)**	**(43.0)**
Depreciation and amortisation included in the expenditure above	(3.7)	(10.7)	(0.8)	(15.2)

Year ended 31 December 2018	NIOX®	COPD	Unallocated	Total
	£m	£m	£m	£m
Revenue (from external customers by country, based on the destination of the customer)				
US	9.4	20.9	-	30.3
UK	1.6	-	-	1.6
EU	6.8	-	-	6.8
Asia Pacific	9.5	-	-	9.5
Rest of world	0.1	-	-	0.1
Total segment revenue	**27.4**	**20.9**	**-**	**48.3**
Cost of sales	(8.9)	-	-	(8.9)
Research and development	(3.2)	(1.0)	(6.6)	(10.8)
Sales and marketing	(32.3)	(22.1)	-	(54.4)
Administrative expenses	-	-	(11.4)	(11.4)
Operating loss from continuing operations	**(17.0)**	**(2.2)**	**(18.0)**	**(37.2)**
Depreciation and amortisation included in the expenditure above	(3.8)	-	(0.6)	(4.4)

Assets by segment

As at 31 December 2019	**NIOX® £m**	**COPD £m**	**Unallocated £m**	**Total £m**
Cash and cash equivalents	11.4	15.3	0.3	27.0
Property, plant and equipment	-	0.5	-	0.5
Right-of-use assets	1.3	0.6	-	1.9
Goodwill	4.8	-	-	4.8
Intangible assets	45.3	117.7	-	163.0
Deferred tax assets	18.9	9.4	-	28.3
Inventories	3.5	3.0	-	6.5
Trade and other receivables	6.8	7.8	-	14.6
Current tax assets	0.2	-	-	0.2
Total assets	**92.2**	**154.3**	**0.3**	**246.8**

As at 31 December 2018	NIOX® £m	COPD £m	Unallocated £m	Total £m
Cash and cash equivalents	7.1	4.9	28.7	40.7
Property, plant and equipment	-	0.5	-	0.5
Goodwill	5.2	4.1	-	9.3
Intangible assets	50.7	170.7	-	221.4
Deferred tax assets	8.2	10.9	-	19.1
Investment in joint venture	-	0.1	-	0.1
Non-current tax assets	-	3.0	-	3.0
Inventories	4.2	-	-	4.2
Trade and other receivables	6.1	2.0	-	8.1
Current tax assets	-	1.0	-	1.0
Total assets	**81.5**	**197.2**	**28.7**	**307.4**

4. Revenue from contracts with customers

The Group derives the following types of revenue:

	2019 £m	2018 £m
Sale of goods	**60.7**	27.0
Rendering of services	**1.6**	21.3
Licence and milestone revenue	**0.1**	-
Total revenue from contracts with customers	**62.4**	48.3

All revenue is recognised at a point in time, rather than over time.

5. Employees and directors

The average monthly number of persons (including Executive Directors) employed during the year was:

	Group		Company	
By activity	**2019 Number**	2018 Number	**2019 Number**	2018 Number
Office and management	**46**	43	**6**	8
Sales and marketing	**244**	285	**-**	-
Research and development	**32**	39	**-**	-
Total average headcount	**322**	367	**6**	8

Employee benefit costs	Group		Company	
	2019 £m	2018 £m	**2019 £m**	2018 £m
Wages and salaries	**32.8**	39.1	**2.2**	1.5
Social security costs	**4.4**	5.7	**0.3**	0.2
Other pension costs	**1.3**	1.5	**-**	-
Share options expense	**1.4**	2.7	**-**	-
Total employee benefit costs	**39.9**	49.0	**2.5**	1.7

The Group contributes to defined contribution pension schemes for its Executive Directors and employees. Contributions of £0.1 million (included in other payables) were payable to the funds at the year end (2018: £0.1 million).

The details of directors of the Group who received emoluments from the Group during the year are shown in the Remuneration Committee report on page [x.

Key management personnel

Key management personnel during the year included directors (Executive and Non-Executive), Senior VP of Commercial US, General Counsel and Chief Compliance Officer, Senior VP of Human Resources and Senior VP of Commercial EU & RoW. The compensation paid or payable to key management is set out below.

	2019 £m	2018 £m
Short-term employee benefits (including bonus)	**3.2**	3.7
Post-employment benefits	**1.2**	0.1
Share based payment	**0.6**	1.0
Total	**5.0**	4.8

Post-employment benefits have increased mainly due to the restructuring of the Board, see the remuneration report for further information.

6. Operating expenses by nature

Operating loss is stated after charging the following:

	Notes	**2019 £m**	2018 £m
Employee benefit expenses	5	**39.9**	49.0
Externally contracted research and development		**1.9**	1.6
Marketing costs		**16.8**	10.7
Legal and professional fees including patent costs		**9.3**	7.5
Depreciation charge of property, plant and equipment[1]	14	**0.3**	0.6
Depreciation charge of right-of-use assets[1]		**0.5**	-
Amortisation charge of intangible assets[1]	17	**14.4**	3.8
Impairment of goodwill	16	**4.1**	4.4
Impairment of intangible assets	17	**86.1**	70.6

[1] Depreciation and amortisation is included on the face of the statement of comprehensive income within 'Research and development costs', 'Sales and marketing' and 'Administative expenses'

7. Other gains and (losses) - net

	2019 £m	2018 £m
Net foreign exchange (loss)/gain	**(3.5)**	1.9
Change in fair value of contingent Duaklir® royalty consideration	**51.4**	(1.1)
Change in fair value of contingent Tudorza® royalty consideration	**2.2**	-
Change in fair value of contingent LungFit™ PH royalty consideration	**23.9**	-
Gain on exercise of Tudorza option	**-**	5.4
Change in fair value of LungFit™ PH contingent consideration	**15.9**	-
Foreign exchange gain/(loss) on non-contingent consideration	**3.8**	(4.4)
Foreign exchange gain/(loss) on contingent royalty consideration	**0.3**	(2.5)
Foreign exchange loss on exercise of Tudorza® option	**-**	(2.7)
Foreign exchange loss on contingent consideration	**-**	(0.3)
Total other gains and losses	**94.0**	(3.7)

On 23 January 2019, Circassia entered into an agreement with to BeyondAir to acquire the commercial rights to LungFit™ PH. In addition to the £8.0 million upfront payments, Circassia owed BeyondAir further consideration of £16.1 million based on certain triggering events. As such, on this date Circassia recognised a contingent liability, and an offsetting intangible asset. As the liability is denominated in United States dollars, this was revalued to £15.9 million.

Following an announcement made by BeyondAir in December 2019 that they are terminating the agreement for the commercial licence of LungFit™ PH, Circassia remeasured the fair value of the contingent liability resulting in a £15.9 million credit to other gains. On the same date, the intangible asset was impaired resulting in an impairment charge of £16.1 million which is included within 'Research and Development costs'.

8. Finance costs and income

	2019 £m	2018 £m
Finance costs:		
Bank charges and interest payable	**(0.2)**	(0.1)
Interest charges for lease liabilities	**(0.1)**	-
Interest charges for borrowings	**(3.2)**	-
Non-contingent consideration: unwinding of discount	**(3.1)**	(7.2)
Contingent royalty consideration: unwinding of discount	**(11.6)**	(3.5)
Non-current trade payables: unwinding of discount	**(0.6)**	(1.2)
Total finance costs	**(18.8)**	(12.0)
Finance income:		
Bank interest receivable	**0.2**	0.3
Total finance income	**0.2**	0.3

9. Auditors' remuneration

Services provided by the Group's auditors and its associates
During the year the Group obtained the following services from the Group's auditors and its associates:

	2019 £m	2018 £m
Fees payable to the Group's auditors and its associates for the audit of the Parent Company and consolidated financial statements	**0.2**	0.2
Fees payable to the Group's auditors and its associates for other services:		
- The audit of the Company's subsidiaries	**0.2**	0.1
Total	**0.4**	0.3

During the year, the Group paid £1,000 (2018: £1,000) to the Group's auditors in respect of non-audit services for an accounting research tool subscription.

10. Discontinued operations

During 2017 it was announced that the Group would no longer continue development of the allergy programmes. Subsequently during 2018, it was announced that the Group would cease investment in the in-house respiratory pipeline. As such, the allergy and respiratory programme costs and the associated research and development tax credit are classified as discontinued operations in the consolidated statement of comprehensive income to comply with IFRS 5 requirements.

Loss for the year	Notes	**2019**	2018
		£m	£m
Expenditure		**-**	(3.7)
Goodwill and intangible assets impairment		**-**	(75.0)
Share of loss of joint venture	19	**-**	(0.1)
Loss before tax		**-**	(78.8)
Taxation	12	**-**	8.3
Loss from discontinued operations		**-**	(70.5)

Cash flow	**2019**	2018
	£m	£m
Net cash outflow from operating activities	**-**	(0.3)
Net decrease in cash from discontinued operations	**-**	(0.3)

11. Non-underlying items

Management primarily manage the business and measure performance based on the results of "underlying operations". Significant irregularly occurring and exceptional items are excluded from the underlying measures. The following non-underlying items have been recognised in the income statement for the period:

	Notes	**2019**	2018
		£m	£m
Charged to research and development costs			
Impairment		**(90.2)**	-
Restructuring costs		**(0.2)**	-
		(90.4)	-
Charged to sales and marketing costs			
Restructuring costs		**-**	(2.9)
		-	(2.9)
Charged to administrative expenses			
AIM transfer costs		**-**	(0.3)
Restructuring costs		**(1.1)**	-
		(1.1)	(0.3)
Credited/(charged) to other gains and losses			
Change in fair value of contingent Duaklir® royalty consideration	7	**51.4**	(1.1)
Change in fair value of contingent Tudorza® royalty consideration	7	**2.2**	-
Change in fair value of contingent LungFit™ PH royalty consideration	7	**23.9**	-
Gain on exercise of Tudorza option	7	**-**	5.4
Change in fair value of LungFit™ PH contingent consideration	7	**15.9**	**-**
Foreign exchange (loss)/ gain on non-contingent consideration	7	**3.8**	(4.4)
Foreign exchange (loss)/ gain on contingent royalty consideration	7	**0.3**	(2.5)
Foreign exchange (loss)/ gain on exercise of Tudorza® option	7	**-**	(2.7)
Foreign exchange (loss)/ gain on contingent consideration	7	**-**	(0.3)
		97.5	(5.6)
Charged to finance costs			
Non-contingent consideration: unwinding of discount	8	**(3.1)**	(3.5)
Contingent consideration: unwinding of discount	8	**-**	(0.1)
Contingent royalty consideration: unwinding of discount	8	**(11.6)**	(7.1)
Non-current trade payables: unwinding of discount	8	**(0.6)**	(1.2)
		(15.3)	(11.9)
Loss before tax		**(9.3)**	(20.7)
Credited to taxation		**-**	-
Loss from continuing operations		**(9.3)**	(20.7)
Loss from discontinued operations	10	**-**	(70.5)
Total loss		**(9.3)**	(91.2)

Impairment
On 19 December 2019, an announcement was made by BeyondAir that they are terminating the agreement for the commercial licence of LungFit™ PH and as such management concluded that impairment was required to the LungFit™ PH CGU. This resulted in an impairment of £44.0 million to intangible assets. See note 17 for further details.

During 2019, the sales performance of Tudorza® and Duaklir® was well below internal forecasts and as such management concluded that impairment was required to the COPD CGU. This resulted in an impairment of £4.1 million to goodwill and £42.1 million to intangible assets. This sales underperformance led to the decision to hand the licences back to AstraZeneca, with the agreement completed and the licences handed back on 27 May 2020. See notes 16 and 17 for further details.

Restructuring costs
Restructuring costs comprise cost optimisation initiatives including severance payments, compensation for loss of office, property and other contract termination costs. Restructuring in 2018 relates to the resizing of the US field force, and as such is allocated to sales and marketing. Restructuring in 2019 relates mainly to the restructuring of the Board.

AIM transfer costs
AIM transfer costs comprise professional fees in relation to the transfer of Circassia Group plc shares from the Main Market to AIM.

Non-contingent consideration
The £3.8 million (2018: £4.4 million) foreign exchange movement on non-contingent consideration relates to the impact of the strengthening dollar on translation of the $100 million, $20 million and $5 million deferred non-contingent consideration payable to AstraZeneca. The consideration was measured by discounting the liability with a £11.6 million (2018: £3.5 million) increase in the liability due to the passage of time (unwinding of discount) recognised as a finance cost in the year.

Contingent consideration
Contingent consideration in the prior year related to the $20 million payable to AstraZeneca on approval of Duaklir®. This consideration was reclassified as non-contingent on the approval of Duaklir in March 2019.

Contingent royalty consideration
Contingent royalty consideration relates to the amount of royalties payable to AstraZeneca on the future Tudorza® and Duaklir® sales, and to BeyondAir on the future sales of LungFit™ PH. The Duaklir® liability was remeasured to fair value at the year end with the resulting £51.4 million (2018: £1.1 million charge) credit recorded in other gains and losses in the income statement. The Tudorza® liability was remeasured to fair value at the year end with the resulting £2.2 million (2018: £nil) credit recorded in other gains and losses in the income statement. The LungFit™ PH liability was remeasured to fair value at the year end with the resulting £23.9 million (2018: £nil) credit recorded in other gains and losses in the income statement. The £0.3 million (2018: £2.5 million) foreign exchange movement relates to the impact of the weakening dollar on translation of the contingent royalty consideration.

Change in fair value of LungFit™ PH contingent consideration
In addition to the £8.0 million upfront payments and £19.9 million of contingent royalty payments, Circassia owed BeyondAir further consideration of £16.1 million based on certain triggering events. As such, on this date Circassia recognised a contingent liability, and an offsetting intangible asset. As the liability is denominated in United States dollars, this was revalued to £15.9 million. Following an announcement made by BeyondAir in December 2019 that they are terminating the agreement for the commercial licence of LungFit™ PH, Circassia derecognised the contingent liability resulting in a £15.9 million credit to other gains.

Loss from discontinued operations
The costs relating to the discontinued allergy and respiratory operations are deemed to be an exceptional item to be excluded from the underlying operations, see note 10 for further details.

12. Taxation

The Group is entitled to claim tax credits in the United Kingdom for certain research and development expenditure. The amount included in the financial statements for the years ended 31 December 2019 and 2018 represents the credit receivable by the Group for the year and adjustments to prior years. The 2019 amounts have not yet been agreed with the relevant tax authorities.

	2019 £m	2018 £m
Current tax		
United Kingdom corporation tax research and development credit	**(0.1)**	(1.0)
Adjustments in respect of prior year	**-**	-
Total current tax credit	**(0.1)**	(1.0)
Deferred tax		
Increase in deferred tax assets	**(9.1)**	(3.5)
Decrease in deferred tax liabilities	**(1.6)**	(13.9)
Adjustments in respect of prior year	**-**	0.9
Total deferred tax credit	**(10.7)**	(16.5)
Total tax credit	**(10.8)**	(17.5)
Tax is attributable to:		
Loss on continuing operations	**(10.8)**	(9.2)
Loss on discontinued operations	**-**	(8.3)
	(10.8)	(17.5)

The tax credit for the year is lower (2018: lower) than the standard rate of corporation tax in the UK of 19.00% (2018: 19.00%). The differences are explained below:

	2019 £m	2018 £m
Loss from continuing operations before tax	**(59.1)**	(55.8)
Loss from discontinued operations before tax	**-**	(78.8)
Loss before tax	**(59.1)**	(134.6)
Loss on ordinary activities before tax multiplied by the standard rate of corporation tax in the UK of 19.00% (2018: 19.00%)	**(11.2)**	(25.6)
Expenses not deductible for tax purposes (permanent differences):	**0.6**	-
Temporary timing differences on employee share options	**-**	0.3
Research and development relief uplift	**(0.2)**	(0.4)
Adjustments in respect of prior year	**-**	0.9
Tax losses for which no deferred income tax asset was recognised	**-**	7.3
Tax credit for the year	**(10.8)**	(17.5)

At 31 December 2019, the Group has tax losses to be carried forward of approximately £526.3 million (2018: £341.3 million). These can be utilised against future taxable profits. At 31 December 2019, Circassia Limited had tax losses to be carried forward of approximately £158.9 million (2018: £148.1 million). The utilisation of these losses will be restricted to 50% of profits generated in the United Kingdom.

At 31 December 2019, the Group has tax assets arising from tax credits in the United Kingdom for certain research and development expenditure of £0.2 million (2018: £4.0 million). None of this is receivable after more than one year (2018: £3.0 million).

13. Loss per share

Basic loss per share is calculated by dividing the loss attributable to ordinary equity holders of the Company by the weighted average number of ordinary shares in issue during the year. As net losses were recorded in both 2019 and 2018, the dilutive potential shares are non-dilutive and therefore excluded from the earnings per share calculation.

For the year ended 31 December 2019

	Continuing operations				
	Underlying operations	**Non-underlying operations**	**Total**	**Discontinued operations**	**Total**
Loss attributable to ordinary equity owners of the Parent Company (£m)	**(39.0)**	**(9.3)**	**(48.3)**	**-**	**(48.3)**
Weighted average number of ordinary shares in issue (Number)	**373,703,488**	**373,703,488**	**373,703,488**	**373,703,488**	**373,703,488**
Loss per share	**(0.11)**	**(0.02)**	**(0.13)**	**-**	**(0.13)**

For the year ended 31 December 2018

	Continuing operations				
	Underlying operations	Non-underlying operations	Total	Discontinued operations	Total
Loss attributable to ordinary equity owners of the Parent Company (£m)	(25.9)	(20.7)	(46.6)	(70.5)	(117.1)
Weighted average number of ordinary shares in issue (Number)	344,347,267	344,347,267	344,347,267	344,347,267	344,347,267
Loss per share	(0.08)	(0.06)	(0.14)	(0.20)	(0.34)

14. Property, plant and equipment

Group	**Leasehold improvements £m**	**Fixtures and fittings £m**	**Plant and equipment £m**	**Total property, plant and equipment £m**
At 1 January 2018				
Cost	0.8	0.5	2.1	3.4
Accumulated depreciation	(0.5)	(0.2)	(1.3)	(2.0)
Net book amount	**0.3**	**0.3**	**0.8**	**1.4**
Year ended 31 December 2018				
Opening net book amount	0.3	0.3	0.8	1.4
Additions	-	0.1	-	0.1
Depreciation charge	(0.1)	(0.1)	(0.4)	(0.6)
Disposals	-	-	(0.4)	(0.4)
Closing net book amount	**0.2**	**0.3**	**-**	**0.5**
At 31 December 2018				
Cost	0.8	0.6	1.7	3.1
Accumulated depreciation	(0.6)	(0.3)	(1.7)	(2.6)
Net book amount	**0.2**	**0.3**	**-**	**0.5**
Year ended 31 December 2019				
Opening net book amount	0.2	0.3	-	0.5
Additions	0.1	0.2	-	0.3
Depreciation charge	(0.1)	(0.2)	-	(0.3)
Closing net book amount	**0.2**	**0.3**	**-**	**0.5**
At 31 December 2019				
Cost	0.9	0.8	1.7	3.4
Accumulated depreciation	(0.7)	(0.5)	(1.7)	(2.9)
Net book amount	**0.2**	**0.3**	**-**	**0.5**

15. Leases

The balance sheet shows the following amounts relating to leases:

	2019 £m	2018 £m
Right-of-use assets		
Leasehold improvements	1.8	-
Plant and equipment	0.1	-
	1.9	**-**
Lease liabilities		
Current	(1.3)	-
Non-current	(0.8)	-
	(2.1)	**-**

Additions to the right-of-use assets during the financial year were £2.4 million (2018: £nil).

The statement of profit or loss shows the following amounts relating to leases:

	Notes	2019 £m	2018 £m
Depreciation charge of right-of-use assets	6	**(0.5)**	-
Interest expense (included in finance cost)	8	**(0.1)**	-
Expense relating to leases of low-value assets that are not shown above as short-term leases (included in administrative expenses)		**(0.2)**	-
		(0.8)	**-**

The total cash outflow for leases in 2019 was £0.9 million.

16. Goodwill

	2019 £m	2018 £m
At 1 January		
Cost	88.2	84.5
Accumulated impairment	(78.9)	(74.5)
Net book amount	**9.3**	**10.0**
Year ended 31 December		
Opening net book amount	9.3	10.0
Acquisition of business	-	3.9
Impairment	(4.1)	(4.4)
Exchange differences	(0.4)	(0.2)
Closing net book amount	**4.8**	**9.3**
At 31 December		
Cost	87.8	88.2
Accumulated impairment	(83.0)	(78.9)
Net book amount	**4.8**	**9.3**

In 2018, following the decision to cease investment in the in-house respiratory portfolio, the respiratory portfolio value was written off in full resulting in an impairment charge for the respiratory CGU of £75.0 million, of which £4.4 million related to goodwill. Subsequently during 2018, Circassia Limited exercised its option to acquire the full US commercial rights over Tudorza® resulting in goodwill of £3.9 million being recognised.

During 2019, the sales performance of Tudorza® and Duaklir® was well below internal forecasts and as such management concluded that impairment was required to the COPD CGU. This resulted in an impairment of £4.1 million to goodwill. This sales underperformance led to the decision to hand the licences back to AstraZeneca, with the agreement completed and the licences handed back on 27 May 2020.

The carrying value of goodwill is allocated to the following CGUs:

Cash generating unit	2019 £m	2018 £m
NIOX®	**4.8**	5.2
COPD (2018: US AZ Collaboration)	**-**	4.1
	4.8	9.3

The recoverable amount of the CGUs is assessed using a value in use model. Value in use is calculated as the net present value of the projected risk-adjusted post-tax cash flows plus a terminal value of the CGU to which the goodwill is allocated.

The value in use for the NIOX® CGU was calculated over a ten year period using a discount factor of 11.5% (being a weighted average cost of capital rate for the CGU). The calculations use post-tax cash flow projections. Cash flows over ten years have been considered appropriate based on the product lifecycle. Cash flows beyond the ten year period were extrapolated using the estimated terminal growth rate stated below. The growth rate does not exceed the long-term average growth rate for the business. The discount rate used is post-tax and reflects specific risks relating to the Group and uncertainties surrounding the cash flow projections. As noted earlier, the value in use calculations include expected revenue growth from historic levels. The impact of COVID-19 is uncertain and has not been included in the impairment assessment this year. The impact will be included in future years, and if sales do not resume growth then this would give rise to an impairment.

The value in use for the COPD (2018: US AZ Collaboration) CGU was calculated using risked post-tax cash flow projections, plus disposal proceeds being the forgiveness of the loan.

The key assumptions used for the valuations of the CGUs are as follows:

NIOX CGU	
Assumption	**Approach used to determine values**
Valuation basis	Value in use
Sales volume	Based on past performance and management's expectations of market development
Sales price	Based on current industry trends and including long-term inflation forecasts for each territory
Operating costs	Management forecasts these costs based on the current structure of the business, adjusting for inflationary increases but not reflecting any future restructurings or cost-saving measures
Profit margins	Based on past performance and management's expectations for the future
Period of specified projected cash flows	10 years
Long-term growth rate	Terminal growth rates based on management's estimate of future long-term average growth rate 2019 – 1% 2018 – 1%
Discount rate	Reflect specific risks relating to the relevant segments and the countries in which they operate 2019 – 11.5% 2018 – 12.5%
COPD (2018: US AZ Collaboration) CGU	
Valuation basis	Value in use
Sales proceeds	Based on agreement with AstraZeneca
Terminal growth rate	Terminal growth rates based on management's estimate of future long-term average growth rate 2019 – n/a 2018 – (5%)
Discount rate	Reflect specific risks relating to the relevant segments and the countries in which they operate 2019 – 12.2% 2018 – 17.0%

Impact of possible changes in key assumptions

Reduction in revenue growth in the NIOX® CGU

Management have, in their sensitivity analysis, assessed the impact of the possibility that sales growth in the NIOX® CGU is less than that of internal forecasts.

If sales growth does not resume in future years following the impact of COVID-19 then this would give rise to an impairment.

COPD CGU

The goodwill allocated to the COPD CGU is fully impaired. No changes in the key assumptions mentioned above would result in a change to this.

17. Intangible assets

Group	IPR&D £m	CMP £m	Customer relationships £m	Technology £m	Intellectual property £m	Other £m	Total intangible assets £m
At 1 January 2018							
Cost	161.9	-	34.6	50.3	-	1.6	248.4
Accumulated amortisation and impairment	(37.1)	-	(4.8)	(5.2)	-	(1.6)	(48.7)
Net book amount	124.8	-	29.8	45.1	-	-	199.7
Year ended 31 December 2018:							
Opening net book amount	124.8	-	29.8	45.1	-	-	199.7
Acquisition of business	-	97.4	-	-	-	0.3	97.7
Amortisation charge	-	-	(1.8)	(2.0)	-	-	(3.8)
Impairment charge	(51.7)	-	-	(18.9)	-	-	(70.6)
Exchange differences	-	-	(0.8)	(0.8)	-	-	(1.6)
Closing net book amount	**73.1**	**97.4**	**27.2**	**23.4**	**-**	**0.3**	**221.4**
At 31 December 2018							
Cost	161.9	97.4	34.6	50.3	-	1.9	346.1
Accumulated amortisation and impairment	(88.8)	-	(7.4)	(26.9)	-	(1.6)	(124.7)
Net book amount	**73.1**	**97.4**	**27.2**	**23.4**	-	**0.3**	**221.4**
Year ended 31 December 2019:							
Opening net book amount	73.1	97.4	27.2	23.4	-	0.3	221.4
Additions	-	-	-	-	44.0	2.0	46.0
Amortisation charge	(2.1)	(8.6)	(1.8)	(1.9)	-	-	(14.4)
Transfers	(71.0)	71.0	-	-	-	-	-
Impairment charge	-	(42.1)	-	-	(44.0)	-	(86.1)
Exchange differences	-	-	(2.1)	(1.8)	-	-	(3.9)
Closing net book amount	**-**	**117.7**	**23.3**	**19.7**	**-**	**2.3**	**163.0**
At 31 December 2019							
Cost	90.9	168.4	34.6	50.3	44.0	3.9	392.1
Accumulated amortisation and impairment	(90.9)	(50.7)	(11.3)	(30.6)	(44.0)	(1.6)	(229.1)
Net book amount	**-**	**117.7**	**23.3**	**19.7**	**-**	**2.3**	**163.0**

The Group tests annually whether goodwill and intangible assets have suffered any impairment and tests more frequently when events or circumstances indicate that the current carrying value may not be recoverable. An impairment test is based on the value in use of the intangible assets. Key assumptions and sensitivities used in the impairment review at a CGU level are disclosed in note 16.

In-Process Research & Development (IPR&D)
IPR&D comprises a portfolio of asthma and chronic obstructive pulmonary disease product candidates.

The IPR&D has been initially valued using the Excess Earnings Method. This valuation method is based on discounting the cash flows that are attributable to the intangible asset, after taking into account the contribution of other assets. IPR&D assets are tested for impairment on the same basis.

Currently Marketed Product (CMP)
CMP comprises the Tudorza® product, which is currently marketed in the United States. This has a useful economic life of 13 years, based on the cumulative present value of the positive excess earnings. When Duaklir® was launched in October 2019, the related assets were transferred from IPR&D assets and into CMP.

The CMP has been initially valued using the Excess Earnings Method. This valuation method is based on discounting the cash flows that are attributable to the intangible asset, after taking into account the contribution of other assets. CMP assets are tested for impairment on the same basis.

The CMP asset was partially impaired to the expected value receivable following the sales underperformance of Tudorza® and Duaklir® which led to the decision to hand the licences back to AstraZeneca. It will be fully disposed of in the 2020 financial year.

Customer relationships

Customer relationships represent the existing customers, as at the date of acquisition that are expected to continue to support the NIOX® business. A remaining useful life of 18 years was determined at acquisition. Amortisation has been calculated on a straight line basis over this period from the date of acquisition.

Technology
Aerocrine developed its technology to measure fractional exhaled nitric oxide ("FeNO") in the mid-1990s. The Company was the first to develop an instrument for the measurement of FeNO as a valuable tool in the management of airway inflammation. This technology is used by the Group in its NIOX® devices. The valuation of the Technology was based on a pre-determined hypothetical royalty rate attributable to the use of the Technology. The estimated remaining useful life of the Technology was determined as 15 years at acquisition. Amortisation has been calculated on a straight line basis over this period from the date of acquisition.

Intellectual property
Intellectual property comprises the LungFit™ PH licence which was acquired from BeyondAir in the current financial year. The asset was initially valued at £44.0 million, being the fair value of consideration. This includes £8.0 million paid upfront in the form of shares and contingent milestone and royalty payments valued at £36.0 million.

The intellectual property was fully impaired following an announcement made by BeyondAir in December 2019 purporting to terminate the agreement for the commercial licence of LungFit™ PH. The Company intends to challenge this termination.

Other
Other intangible assets relate to licences and software. Current year additions relate to the development costs of the new ERP software. Amortisation will be charged once the software has been fully developed and is operational.

18. Investments in subsidiaries

Company	**2019 £m**	2018 £m
Investments in subsidiaries at 1 January	**67.6**	273.5
Equity settled instruments granted to employees of subsidiaries	**1.4**	2.7
Investment in Circassia Beijing	**-**	1.7
Provision against investments	**(12.5)**	(210.3)
Investments in subsidiaries at 31 December	**56.5**	67.6

Investments in subsidiaries are recorded at cost, which is the fair value of the consideration paid.

The Group tests annually whether investments in subsidiaries have suffered any impairment and tests more frequently when events or circumstances indicate that the current carrying value may not be recoverable. An impairment test is based on the value in use of the subsidiaries. Key assumptions and sensitivities used in the impairment review are disclosed in note 16.

A credit loss provision of £12.5 million (2018: £210.3 million) has been recognised due to sales underperformance of Tudorza® and Duaklir® resulting in the handing back of the licences to AstraZeneca, combined with the termination of the agreement for the commercial licence of LungFit™ PH.

Changes in the value in use of the subsidiaries might result in a significantly higher or lower fair value of investments. 10% higher or lower value in use would result in £22.3 million (2018: £35.4 million) lower or higher fair value of investments.

The capital contribution relating to share based payment is for 9,397,741 (2018: 5,103,400) 0.08p share options and 4,322,767 (2018: nil) nil-cost share options granted by the Company to employees of subsidiary undertakings in the Group. Further details on the Group's share option schemes can be found in note 27.

The Group had the following subsidiaries at 31 December 2019:

Name	Registered address	Nature of business	Proportion of ordinary shares held
Circassia Limited	The Magdalen Centre, Robert Robinson Avenue, Science Park, Oxford, OX4 4GA, UK	Sale of devices for management of asthma	100%
Circassia Pharma Limited	The Magdalen Centre, Robert Robinson Avenue, Science Park, Oxford, OX4 4GA, UK	Dormant	100%
Circassia Pharmaceuticals Inc	5151 McCrimmon Parkway, Suite 260, Morrisville, North Carolina 27560, USA	Sale of asthma management devices and respiratory products	100%
Circassia AB	Fyrislundsgatan 80, 754 50, Uppsala, Sweden	Development and sale of devices for management of asthma	100%
Circassia AG	Louisenstraße 21, 61348, Bad Homburg, Germany	Sale of devices for management of asthma	100%
Prosonix Limited	The Magdalen Centre, 1 Robert Robinson Avenue, Oxford Science Park, Oxford, OX4 4GA, UK	Dormant	100%
Circassia (Beijing) Medical Device Co. Limited	Room 1109 Jing Guang Center Office Building, No 1 Chao Yang Men Wai Avenue, Hu Jia Lou, Chao Yang District, Beijing, 100020, P.R. China	Sale of devices for management of asthma	100%
Circassia srl	Viale Andrea Doria 7, 20124 Milano, Italia	Sale of devices for management of asthma	100%

All subsidiary undertakings are included in the consolidation. The proportion of the voting rights in the subsidiary undertakings held directly by the Parent Company does not differ from the proportion of ordinary shares held. All investments held by the Parent Company are equal to the holdings of the Group. The Parent Company does not have any shareholdings in the preference shares of subsidiary undertakings included in the Group.

19. Investment in joint venture

	2019 £m	2018 £m
At 1 January	**0.1**	0.5
Share of loss	**-**	(0.1)
Distributions to owners	**(0.1)**	(0.3)
At 31 December	**-**	0.1

The joint venture listed below has share capital consisting solely of ordinary shares, which is held directly by the Group.

Nature of investment in joint venture 2019 and 2018:

Name of entity	Registered address	% of ownership interest	Nature of the relationship	Measurement method
Adiga Life Sciences	McMaster Innovation Park, Suite 305, 175 Longwood Road South Hamilton, Ontario, Canada	50	Note 1	Equity

Note 1.
Adiga Life Sciences ("Adiga") is a joint venture with McMaster University in Canada for early epitope and mechanistic clinical studies.

Adiga Life Sciences is a private company and there is no quoted market price available for its shares.

There are no contingent liabilities or commitments relating to the Group's interest in the joint venture.

Summarised financial information for joint venture

Set out below is the summarised financial information for Adiga which is accounted for using the equity method.

Summarised statement of financial position at 31 December	**2019 £m**	2018 £m
Current assets		
Trade and other receivables	**-**	0.1
Cash	**-**	0.1
	-	0.2
Net assets	**-**	0.2

Summarised statement of comprehensive income for the year ended 31 December	**2019 £m**	2018 £m
Revenue	**-**	-
Research and development costs	**-**	-
Administrative expense	**-**	(0.2)
Loss from operation	**-**	(0.2)
Income tax	**-**	-
Post tax loss from operation	**-**	(0.2)

The information above reflects the amounts presented in the financial statements of the joint venture adjusted for differences in accounting policies between the Group and the joint venture (and not Circassia Group plc's share of those amounts).

The Adiga Life Sciences joint venture managed clinical research organisations (CROs) in Canada in respect of allergy programmes on behalf of Circassia Group plc. As the allergy programmes are no longer being continued, the results of the joint venture for the year ended 31 December 2019 and 2018 have been included within discontinued operations in the consolidated statement of comprehensive income, see note 10.

Reconciliation of summarised financial information

Reconciliation of the summarised financial information presented to the carrying amount of the Company's interest in the joint venture.

Summarised financial information	2019 £m	2018 £m
Opening net assets 1 January	**0.2**	1.0
Loss for the year	**-**	(0.2)
Dividends paid	**(0.2)**	(0.6)
Closing net assets	**-**	0.2
Interest in joint venture @ 50%	**-**	0.1
Carrying value	**-**	0.1

20. Inventories

	2019 £m	2018 £m
Finished goods	**6.5**	4.2

Inventories recognised as an expense during the year ended 31 December 2019 amounted to £13.9 million (2018: £7.5 million). These were included in cost of sales.

Write-downs of inventories to net realisable value amounted to £2.3 million (2018: £0.5 million). These were recognised as an expense during the year and included in cost of sales. The increase in write-downs is due to a higher level of Duaklir ® inventory held at the year end compared to forecast inventory requirements. There has been no reversal of any write down in the year ended 31 December 2019.

21. Trade and other receivables

	Group		Company	
	2019 £m	2018 £m	**2019 £m**	2018 £m
Trade receivables	**12.4**	3.7	**-**	-
Prepayments and accrued income	**1.9**	3.9	**-**	-
Other receivables	**0.3**	0.5	**-**	0.9
Receivables from subsidiary undertakings	**-**	-	**35.1**	281.7
Total trade and other receivables	**14.6**	8.1	**35.1**	282.6

Included within trade receivables is £0.6 million (2018: £0.4 million) of invoices that were more than 30 days past due at the end of the reporting year but which have not been impaired.

Receivables from subsidiary undertakings are amounts provided by the Company to its subsidiaries in order to undertake commercial operations. The receivables are unsecured and have no fixed date of repayment. Recoverability of the amounts is dependent on the future profitability of subsidiary undertakings. As at 31 December 2019, an expected credit loss of £347.8 million (2018: £91.4 million) was recognised against receivables from subsidiary undertakings.

The carrying amounts of the Group and Company receivables, excluding prepayments and recoverable taxes, are denominated in the following currencies:

	Group		Company	
	2019 £m	2018 £m	**2019 £m**	2018 £m
British pound sterling	**0.3**	0.7	**-**	181.7
United States dollar	**9.7**	3.7	**35.1**	100.9
Swedish krona	**0.1**	0.1	**-**	-
Euro	**1.6**	1.8	**-**	-
Chinese yuan	**1.4**	-	**-**	-
	13.1	6.3	**35.1**	282.6

22. Cash and cash equivalents

The Group and Company cash and cash equivalents are held with institutions with the following Fitch IBCA long-term rating:

	Group		Company	
	2019 £m	2018 £m	**2019 £m**	2018 £m
AA	**0.6**	0.6	**-**	-
AA-	**14.4**	31.4	**0.1**	0.1
A+	**11.7**	-	**-**	-
A	**-**	7.1	**-**	-
BBB	**0.3**	1.6	**-**	-
	27.0	40.7	**0.1**	0.1

The Group and Company cash and cash equivalents are held in the following currencies at 31 December:

	Group		Company	
	2019 £m	2018 £m	**2019 £m**	2018 £m
British pound sterling	**1.8**	23.2	**0.1**	0.1
United States dollar	**22.9**	13.0	**-**	-
Euro	**1.8**	4.0	**-**	-
Swedish krona	**0.2**	0.5	**-**	-
Chinese yuan	**0.3**	-	**-**	-
	27.0	40.7	**0.1**	0.1

23. Trade and other payables

	Group		Company	
	2019 £m	2018 £m	**2019 £m**	2018 £m
Trade payables	**9.1**	19.1	**0.1**	0.1
Social security and other taxes	**0.3**	0.3	**-**	-
Accruals	**29.3**	7.6	**0.2**	0.5
Other payables	**0.9**	1.7	**-**	-
Payables to subsidiary undertakings	**-**	-	**7.6**	5.5
Total trade and other payables	**39.6**	28.7	**7.9**	6.1

Trade payables are unsecured and are usually paid within 30 days of recognition.

The carrying amounts of trade and other payables are considered to be the same as their fair values, due to their short-term nature.

24. Financial assets and financial liabilities

The Group's financial instruments comprise cash and cash equivalents, short-term bank deposits, trade and other receivables, trade and other payables, contingent consideration and finance lease liabilities. Additional disclosures are set out in the accounting policies relating to financial and capital risk management (note 2).

The Group had the following financial instruments at 31 December each year:

Financial assets	**2019 £m**	2018 £m
Financial assets at amortised cost		
Trade and other receivables	**14.6**	8.1
Cash and cash equivalents	**27.0**	40.7
	41.6	48.8

Financial liabilities	**2019 £m**	2018 £m
Financial liabilities at amortised cost		
Trade and other payables	**39.6**	28.7
Borrowings	**109.9**	-
Non-contingent consideration	**-**	80.3
Financial liabilities at fair value through profit or loss		
Contingent consideration	**1.1**	61.6
Lease liabilities	**2.1**	-
	152.7	170.6

The Company had the following financial instruments at 31 December each year:

Financial assets	**2019 £m**	2018 £m
Financial assets at amortised cost		
Cash and cash equivalents	**0.1**	0.1
Other receivables	**-**	0.9
Receivables from subsidiary undertakings	**35.1**	281.7
	35.2	282.7

Liabilities	**2019 £m**	2018 £m
Financial liabilities at amortised cost		
Trade and other payables	**0.1**	0.6
Payables to subsidiary undertakings	**7.6**	5.5
	7.7	6.1

Cash balances comprise floating rate instant access deposits earning interest at prevailing bank rates.

In accordance with IFRS 9 the Group has reviewed all contracts for embedded derivatives that are required to be separately accounted for if they do not meet certain requirements set out in the standard. There were no such derivatives identified at 31 December 2019 or 31 December 2018.

Financial liabilities at fair value through profit or loss

The Group designates contingent consideration payable as fair value through profit or loss. The movement in the year is as follows:

Contingent consideration	**2019 £m**	2018 £m
At 1 January	**61.6**	33.6
Additional consideration payable on acquisition of LungFit™ PH	**36.8**	-
Unwinding of discount	**11.6**	23.9
Change in fair value	**(93.4)**	1.3
Settlement of consideration	**(15.8)**	-
Foreign exchange movement	**0.3**	2.8
At 31 December	**1.1**	61.6

The contingent consideration is made up of £1.1 million relating to Tudorza® (2018: £17.5 million) and £nil relating to Duaklir® (2018: £44.1 million).

On 21 June 2019, Circassia settled £15.8 million ($20 million) payable to AstraZeneca under the agreement signed in 2017. This was offset by a loan from AstraZeneca. See note 25.

Fair value
The directors consider that the fair values of the Group's financial instruments do not differ significantly from their book values except as described below.

Contingent consideration is remeasured to fair value, calculated using a discounted cash flow approach. The valuation methodology uses significant inputs which are not based on observable market data (unobservable inputs), therefore this valuation technique is classified as level 3 in the fair value hierarchy.

25. Borrowings

In June 2019, the Group entered into a loan facility with AstraZeneca to finance consideration payable under the collaboration agreement.

The following amounts were drawn down during the financial year:

21 June 2019	-	£3.8 million ($5 million)
21 June 2019	-	£15.8 million ($20 million)
7 August 2019	-	£82.3 million ($100 million)
1 October 2019	-	£14.9 million ($18.3 million)

The loan is a variable rate, United States dollar denominated loan, which is carried at amortised cost. It impacts the Group's exposure to cash flow interest rate risk and foreign exchange risk.

The table below analyses the Group's borrowings into relevant maturity groupings based on the remaining period at the balance sheet date to the contractual maturity date. As at 31 December, the contractual maturities of the Group's non-derivative financial liabilities were as follows:

	2019			2018		
	Current	**Non-current**	**Total**	Current	Non-current	Total
	£m	**£m**	**£m**	£m	£m	£m
Loans	**-**	**109.9**	**109.9**	-	-	-

As at year end, the total balance of the loan consisted of £108.7 million (2018: £nil) principal loan amount and £1.2 million (2018: £nil) capitalised unpaid interest. On 27 May 2020, the Tudorza® and Duaklir® licences were handed back to AstraZeneca and the loan was set off in its entirety.

26. Deferred taxation

	Intangibles £m	Tax losses £m	Net deferred tax liability £m
As at 1 January 2018	24.1	(15.7)	8.4
Credit to the income statement	(13.2)	(3.4)	(16.6)
As at 31 December 2018	**10.9**	**(19.1)**	**(8.2)**
At 1 January 2019	**10.9**	**(19.1)**	**(8.2)**
Credit to the income statement	(1.6)	(9.2)	(10.8)
As at 31 December 2019	**9.3**	**(28.3)**	**(19.0)**

	2019 £m	2018 £m
Deferred tax liabilities	**9.3**	10.9
Deferred tax assets	**(28.3)**	(19.1)
Total deferred tax position	**(19.0)**	(8.2)

The Group has the following unrecognised potential deferred tax assets as at 31 December:

	2019 £m	2018 £m
Losses	**61.0**	58.0
Total unrecognised deferred tax asset	**61.0**	58.0

Swedish deferred tax assets and liabilities are recognised at a rate of 20.6% (2018: 20.6%).

UK deferred tax assets and liabilities are recognised at a rate of 17% (2018: 17%).

In the Spring Budget 2020, the Government announced that from 1 April 2020 the UK corporation tax rate would remain at 19% (rather than reducing to 17%, as previously enacted). This new law was substantively enacted on 17 March 2020. As the proposal to keep the rate at 19% had not been substantively enacted at the balance sheet date, its effects are not included in these financial statements. However, it is likely that the overall effect of the change, had it been substantively enacted by the balance sheet date, would be to increase the unrecognised potential deferred tax asset by £3.3 million.

The effect of COVID-19 is uncertain and the impact has not been included in the deferred tax asset calculation this year. The impact will be included in future years, and if sales do not resume growth then this would give rise to an impairment.

27. Share based payments

Share options
Options have been awarded under the Circassia PSP Share Option Scheme ("the PSP Scheme") and the Circassia Unapproved Share Option Scheme ("the Unapproved Scheme").

The share options outstanding can be summarised as follows:

	2019 Number of ordinary shares ('000)	2018 Number of ordinary shares ('000)
PSP Scheme [1]	**19,849**	10,671
Unapproved Scheme [2]	**187**	187
	20,036	10,858

The contractual life of all options is 10 years and the options cannot normally be exercised before the third anniversary of the date of grant.

1 Options granted under the PSP Scheme have a fixed exercise price and are subject to additional vesting performance conditions. The exercise price of options granted under the 2014 PSP scheme is £nil and all subsequent PSP scheme awards have an exercise price of £0.0008. The performance conditions for awards made before 2019 state that a proportion of an award shall vest subject to the Company Total Shareholder Return (TSR) ranking against the Comparator Index TSR and the remaining shall vest subject to the meeting of certain strategic Company objectives. Options typically vest over a period of 3 years.

[2] Options granted under the Unapproved Scheme also have a fixed exercise price based on the market price at the date of grant.

The movement in share options outstanding is summarised in the following table:

	2019 Number of options '000	**2019 Weighted average exercise price per share option £**	2018 Number of options '000	2018 Weighted average exercise price per share option £
Outstanding at 1 January	**10,858**	**0.04**	9,042	0.05
Granted	**13,721**	**0.0005**	5,103	0.0008
Forfeited/ lapsed	**(4,374)**	**0.0008**	(3,129)	0.0007
Exercised	**(169)**	**0.0008**	(158)	0.0005
Outstanding at 31 December	**20,036**	**0.02**	10,858	0.04
Vested and exercisable at 31 December	**739**	**0.61**	762	0.59

Share options outstanding at the end of the year have the following expiry dates and exercise prices:

Scheme	**Grant year**	**Expiry year**	**Exercise price £**	**Share options 2019 '000**	Share options 2018 '000
PSP 2014	2014	2024	0	**150**	284
PSP 2015	2015	2025	0.0008	**119**	291
PSP 2016	2016	2026	0.0008	**284**	2,510
PSP 2017	2017	2027	0.0008	**2,614**	3,029
PSP 2018	2018	2028	0.0008	**3,894**	4,557
PSP 2019	2019	2029	0.0008	**12,788**	-
Unapproved	2013 - 2014	2023 – 2024	2.416	**187**	187
Total				**20,036**	10,858

The weighted average remaining contractual life of share options outstanding at the end of the year was 9.0 years (2018: 8.4 years).

Options exercised in 2019 resulted in 169,418 (2018: 158,044) shares being issued at a weighted average price of £0.0008 (2018: £0.0005) each.

Valuation models
The fair value of PSP share options granted during the year was determined using the Monte Carlo Simulation model and the Finnerty Model dependent on the vesting period.

Monte Carlo Simulation
The following weighted average assumptions were used in the Monte Carlo Simulation model in calculating the fair values of the options granted during the year:

	2019	2018
Exercise price	**£0.0008**	£0.0008
Share price	**£0.32**	£0.90
Expected volatility	**36%**	35%
Expected life	**3 years**	3 years
Expected dividends	**0%**	0%
Risk free interest rate	**0.74%**	0.89%

The Monte Carlo Simulation model has been used to value the portion of the awards which have a market performance vesting condition (Total Shareholder Return (TSR)). The model incorporates a discount factor reflecting this performance condition into the fair value of this portion of the award.

The weighted average fair value of options granted during the year determined using the Monte Carlo Simulation model at the grant date was £0.24 per option (2018: £0.90).

For the options valued using the Monte Carlo Simulation, expected volatility is measured by calculating the standard deviation of the natural logarithm of share price movements of comparable companies. This is a standard approach to calculating volatility. The risk free rate of return is the rate of interest obtainable from government securities as at the date of grant (i.e. Gilts in the UK) over the expected term (i.e. three years).

The Finnerty Model
For LTIP awards that are subject to an additional two-year post-vesting holding period, the Finnerty model (an at-market put option variant of the Black-Scholes model) has been used to determine a discount for the lack of marketability.

The following weighted average assumptions were used in calculating the fair values of the options granted during the year:

	2019
Exercise price	**£0.0008**
Share price	**£0.19**
Expected volatility	**45%**
Expected life	**5 years**
Expected dividends	**0%**
Risk free interest rate	**0.38%**

This discount has only been applied to the shares that are subject to the sales restriction (i.e. post any permitted sales for tax/legal purposes and any lapses from failing to meet performance conditions).

The weighted average fair value of options granted during the year determined using the Finnerty Model at the grant date was £0.18 per option (2018: nil).

Deferred shares
During the year the Group awarded 412,706 (2018: 251,377) deferred shares to Executive Directors as part of a deferred bonus for 2018. The shares are held by the Circassia Pharmaceuticals plc Employee Benefit Trust (the "Trust") until the third anniversary of the grant date when they will transfer to the Executive Directors so long as they are still an officer or employee of the Group.

Income statement
See note 5 for the total expense recognised in the income statement in respect of the above equity settled instruments granted to directors and employees.

28. Share capital

Authorised, called up and fully paid	2019 £m	2018 £m
375,199,334 (2018: 357,286,434) ordinary shares of 0.08p each	**0.3**	0.3

Movements in ordinary shares

	Number of shares	Par value £m
As at 1 January 2019	357,286,434	0.3
Share issue to BeyondAir	17,572,815	-
Share issue to Numis Securities	177,405	-
Employee share scheme issues	162,680	-
As at 31 December 2019	**375,199,334**	**0.3**

29. Share premium

Group and Company	2019 £m	2018 £m
At 1 January	**622.5**	602.2
Issue of new shares	**8.0**	20.4
Transaction costs arising on share issues	**(0.1)**	(0.1)
At 31 December	**630.4**	622.5

30. Accumulated losses

	Group		Company	
	2019 £m	2018 £m	2019 £m	2018 £m
At 1 January	**(512.0)**	(394.9)	**(289.9)**	1.9
Change in accounting policy	**(0.3)**	-	**-**	-
Restated at 1 January	**(512.3)**	(394.9)	**(289.9)**	1.9
Loss for the year	**(48.3)**	(117.1)	**(268.8)**	(291.8)
At 31 December	**(560.6)**	(512.0)	**(558.7)**	(289.9)

31. Other reserves

Group	Share option reserve £m	Translation reserve £m	Treasury shares reserve £m	Transactions with non-controlling interests £m	Total other reserves £m
At 1 January 2018	8.9	15.1	(0.7)	(6.1)	17.2
Employee share option scheme	2.7	-	-	-	2.7
Currency translation differences	-	(4.8)	-	-	(4.8)
At 31 December 2018	**11.6**	**10.3**	**(0.7)**	**(6.1)**	**15.1**
Employee share option scheme	1.4	-	-	-	1.4
Reclassification of treasury shares	-	-	(0.2)	-	(0.2)
Currency translation differences	-	(1.6)	-	-	(1.6)
At 31 December 2019	**13.0**	**8.7**	**(0.9)**	**(6.1)**	**14.7**

Company	Share option reserve £m	Own shares reserve £m	Total other reserves £m
At 1 January 2018	8.6	-	8.6
Employee share option scheme	2.7	-	2.7
At 31 December 2018	**11.3**	**-**	**11.3**
Employee share option scheme	1.4	-	1.4
Reclassification of acquisition of own shares	-	(0.9)	(0.9)
At 31 December 2019	**12.7**	**(0.9)**	**11.8**

Nature and purpose of other reserves

Share option reserve
The share option reserve is used to recognise:

- the grant date fair value of options issued to employees but not exercised;
- the grant date fair value of shares issued to employees;
- the grant date fair value of deferred shares granted to employees but not yet vested; and
- the issue of shares held by the Circassia Pharmaceuticals plc Employee Benefit Trust (the "Trust") to employees.

Translation reserve
Exchange differences arising on translation of the foreign controlled entity are recognised in other comprehensive income and accumulated in a separate reserve within equity. The cumulative amount is reclassified to profit or loss when the net investment is disposed of.

Transactions with non-controlling interests
This reserve is used to record the differences which arise as a result of transactions with non-controlling interests that do not result in a loss of control.

Treasury shares reserve/own shares reserve
This reserve arose when the Parent Company purchased own shares through the Trust to satisfy the issue of shares to employees under the Deferred Bonus Share Plan (DBSP) and the Performance Share Plan (PSP) in relation to 2014.

In the previous year, these shares were classified as a loan from the Trust in Circassia Limited, however during the year it came to light that these shares had been gifted to the Trust and therefore recognised as an own shares reserve in the Parent Company.

The details of shares purchased by the Trust are as follows:

Scheme	Number of shares	Nominal value of shares £	Amount of consideration paid £m
DSBP 2014	110,845	0.0008	0.3
DSBP 2015	156,036	0.0008	0.4
DSBP 2017	251,377	0.0008	0.2
Total	**518,258**	**0.0008**	**0.9**

32. Cash (used in)/generated from operations

Reconciliation of loss before tax to net cash used in operations

	Notes	Group		Company	
		2019 £m	2018 £m	**2019 £m**	2018 £m
Loss from continuing operations before tax		**(59.1)**	(55.8)	**(268.8)**	(291.8)
Loss from discontinued operations before tax	10	**-**	(78.8)	**-**	-
Loss before tax		**(59.1)**	(134.6)	**(268.8)**	(291.8)
Adjustments for:					
Finance income	8	**(0.2)**	(0.3)	**(6.5)**	(0.2)
Finance costs	8	**18.8**	12.0	**-**	(4.6)
Depreciation charge of property, plant and equipment	14	**0.3**	0.6	**-**	-
Depreciation charge of right-of-use assets		**0.5**	-	**-**	-
Amortisation	17	**14.4**	3.8	**-**	-
Goodwill impairment	16	**4.1**	4.4	**-**	-
Intangible assets impairment	17	**86.1**	70.6	**-**	-
Profit on sale of fixed assets		**-**	(0.1)	**-**	-
Impairment of investments	18	**-**	-	**12.5**	210.3
Share of loss of joint venture	19	**-**	0.1	**-**	-
Fair value (gain)/loss on contingent royalty consideration	7	**(77.5)**	1.1	**-**	-
Fair value (gain)/loss on LungFit™PH contingent liability	7	**(15.9)**	**-**	**-**	**-**
Change in fair value of deferred consideration	7	**-**	(5.4)	**-**	-
Share based payment charge	5	**1.4**	2.7	**-**	-
Foreign exchange on non-operating cash flows		**(0.5)**	6.7	**-**	6.2
Changes in working capital:					
(Increase)/ decrease in trade and other receivables		**(7.1)**	10.9	**-**	(0.1)
Increase in credit loss provision		**-**	0.1	**256.4**	91.4
Increase in inventories		**(2.7)**	(0.1)	**-**	-
Increase/(decrease) in trade and other payables		**8.5**	(23.8)	**(0.3)**	0.5
Cash (used in)/generated from operations		**(28.9)**	(51.3)	**(6.7)**	11.7

In the statement of cash flows, proceeds from sale of property, plant and equipment comprise:

	2019 £m	2018 £m
Net book amount (note 14)	-	0.4
Profit on disposal of property, plant and equipment	-	0.1
Proceeds from disposal of property, plant and equipment	**-**	0.5

Non-cash investing and financing activities disclosed in other notes are:

- Acquisition of right-of-use assets – note 15
- Acquisition of LungFit™ PH licence through the issue of shares – note 28

33. Contingent liabilities and assets

At the end of 2019, BeyondAir issued a notice stating that it had terminated its Licensing Agreement for LungFit™PH with Circassia for material breach. Circassia strongly refutes BeyondAir's allegations and believes there are no grounds for termination. Circassia intends to assert claims in accord with the dispute resolution provisions of the License Agreement to recover its economic losses as a result of BeyondAir's actions, including amounts paid to BeyondAir under the Agreement and loss of future economic benefits that would have accrued to Circassia but for BeyondAir's actions.

There were no contingent liabilities at 31 December 2019 or at 31 December 2018.

34. Operating lease commitments

The Group leases various offices, warehouses and vehicles under non-cancellable operating leases expiring within one year to over five years. The total of future minimum lease payments payable under the Group's non-cancellable operating leases for each of the following periods is as follows:

	2019 £m	2018 £m
Within one year	**-**	1.2
Later than one year but not later than five years	**-**	1.4
Later than five years	**-**	1.1

From 1 January 2019, the group has recognised right-of-use assets for these leases, except for short-term and low-value leases which are classified as operating leases. See note 15.

The total of future minimum sublease payments expected to be received for the Chicago property no longer utilised by the Group is £1.0 million (2018: £1.3 million).

35. Commitments

There were no capital commitments as at 31 December 2019 or at 31 December 2018.

36. Related party transactions

Group

There is no ultimate controlling party of the Group as ownership is split between the Company's shareholders. The most significant shareholders as at 31 December are as follows:

	Ownership interest	
Name	**2019**	2018
Griffiths R I	**27.30%**	0.00%
AstraZeneca PLC	**18.94%**	19.89%
Invesco Asset Management	**13.65%**	24.11%
Harwood Capital LLP	**8.00%**	0.00%
Lombard Odier Asset Management Europe	**5.14%**	0.00%

There were no transactions with related parties during the years ended 31 December 2019 and 2018.

Company

The following transactions with subsidiaries occurred in the year:

	2019 £m	2018 £m
Rendering of services to Circassia Limited[1]	**1.2**	1.2
Settlement of liabilities on behalf of the subsidiaries	**-**	(2.5)
Net transfer of funds to subsidiaries	**6.1**	89.2
	7.3	87.9

[1] Remuneration costs (excluding share option charges) relating to the Executive Directors of Circassia Group plc in respect of services rendered to Circassia Limited.

	2019 £m	2018 £m
Balances due from subsidiary companies	**35.1**	281.7
Balances due to subsidiary companies	**(7.6)**	(5.5)

The amounts due are unsecured and have no fixed date of repayment. Interest is charged at a rate of LIBOR + 4%.

Employee benefit trust
In 2014 the Company set up an employee benefit trust for the purposes of buying and selling shares on the employees behalf. Nothing was paid into the Trust by the Company during the year ended 31 December 2019 (2018: £198,293).

No shares were purchased by the Trust during the year ended 31 December 2019 (2018: 251,377). As at 31 December 2019 a cash balance of £4,586 (2018: £4,658) was held by the Trust.

37. Events occurring after the reporting date

On 9 April 2020, it was announced that the development and commercialisation agreement between Circassia and AstraZeneca was terminating. On the completion date of 27 May 2020, AstraZeneca acquired the U.S. commercial rights to Tudorza® and Duaklir® together with certain ancillary rights and assets, from Circassia the consideration for which was equal to, and satisfied by way of set-off against, the entirety of the loan amount outstanding from the Company to AstraZeneca, together with accrued interest owed by the Company to AstraZeneca.

On 30 April 2020, a special resolution was passed to approve the change of the Company's name and with effect from 1 May 2020, the name of the Company was changed from Circassia Pharmaceuticals plc to Circassia Group plc.

38. Change in accounting policy

This note explains the impact of the adoption of IFRS 16 Leases on the Group's financial statements and discloses the new accounting policies that have been applied from 1 January 2019 in note 1.

The Group has adopted IFRS 16 retrospectively from 1 January 2019 but has not restated comparatives for the 2018 reporting period, as permitted under the specific transitional provisions in the standard. The reclassifications and the adjustments arising from the new leasing rules are therefore recognised in the opening balance sheet on 1 January 2019.

(a) Adjustments recognised on adoption of IFRS 16

On adoption of IFRS 16, the group recognised lease liabilities in relation to leases which had previously been classified as 'operating leases' under the principles of IAS 17 Leases. These liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate as of 1 January 2019. The weighted average lessee's incremental borrowing rate applied to the lease liabilities on 1 January 2019 was 3.5%.

	1 January 2019 £m
Operating lease commitments disclosed as at 31 December 2018	**3.7**
Discounted using the lessee's incremental borrowing rate of at the date of initial application	**3.1**
Less: low-value leases recognised on a straight-line basis as expense	**(0.2)**
Less: adjustments relating to changes in the index or rate affecting variable payments	**(0.4)**
Lease liability recognised as at 1 January 2019	**2.5**
Of which are:	
Current lease liabilities	**0.6**
Non-current lease liabilities	**1.9**
	2.5

The associated right-of-use assets for property leases were measured on a retrospective basis as if the new rules had always been applied. Other right-of use assets were measured at the amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognised in the balance sheet as at 31 December 2018. There were no onerous lease contracts that would have required an adjustment to the right-of-use assets at the date of initial application.

The recognised right-of-use assets relate to the following types of assets:

	1 January 2019 £m
Motor vehicles	**0.1**
Leasehold assets	**2.3**
Total right-of-use assets	**2.4**

The change in accounting policy affected the following items in the balance sheet on 1 January 2019:

- right-of-use assets – increase by £2.4 million
- prepayments – decrease by £0.1 million
- finance lease liabilities – increase by £2.5 million

The net impact on accumulated losses on 1 January 2019 was an increase of £0.3 million.

Practical expedients applied

In applying IFRS 16 for the first time, the Group has used the following practical expedients permitted by the standard:

- the use of a single discount rate to a portfolio of leases with reasonably similar characteristics
- reliance on previous assessments on whether leases are onerous
- the accounting for operating leases with a remaining lease term of less than 12 months as at 1 January 2019 as short-term leases, and
- the use of hindsight in determining the lease term where the contract contains options to extend or terminate the lease.

The Group has also elected not to reassess whether a contract is or contains a lease at the date of initial application. Instead, for contracts entered into before the transition date the group relied on its assessment made applying IAS 17 and IFRIC 4 *Determining whether an Arrangement contains a Lease.*